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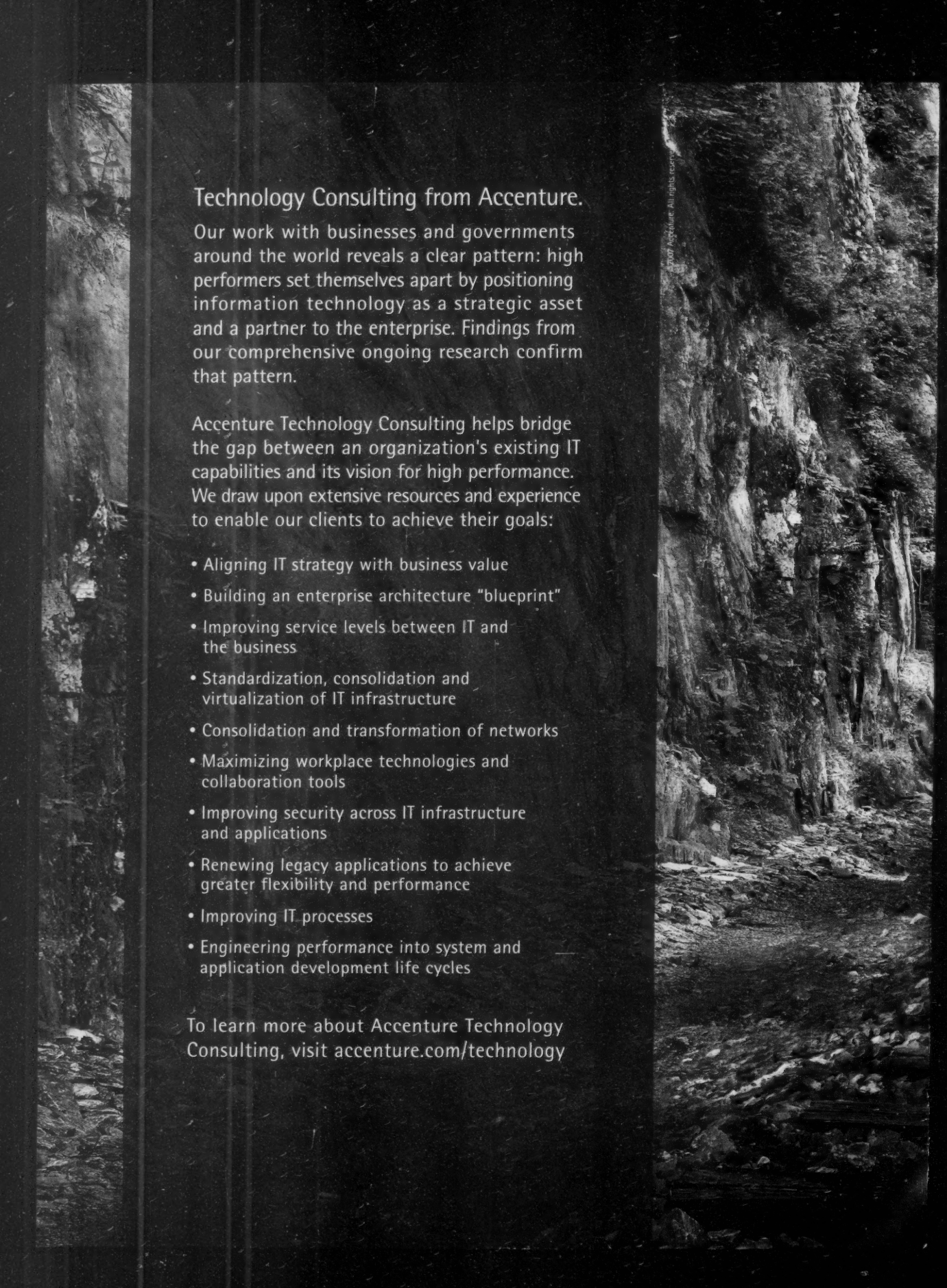
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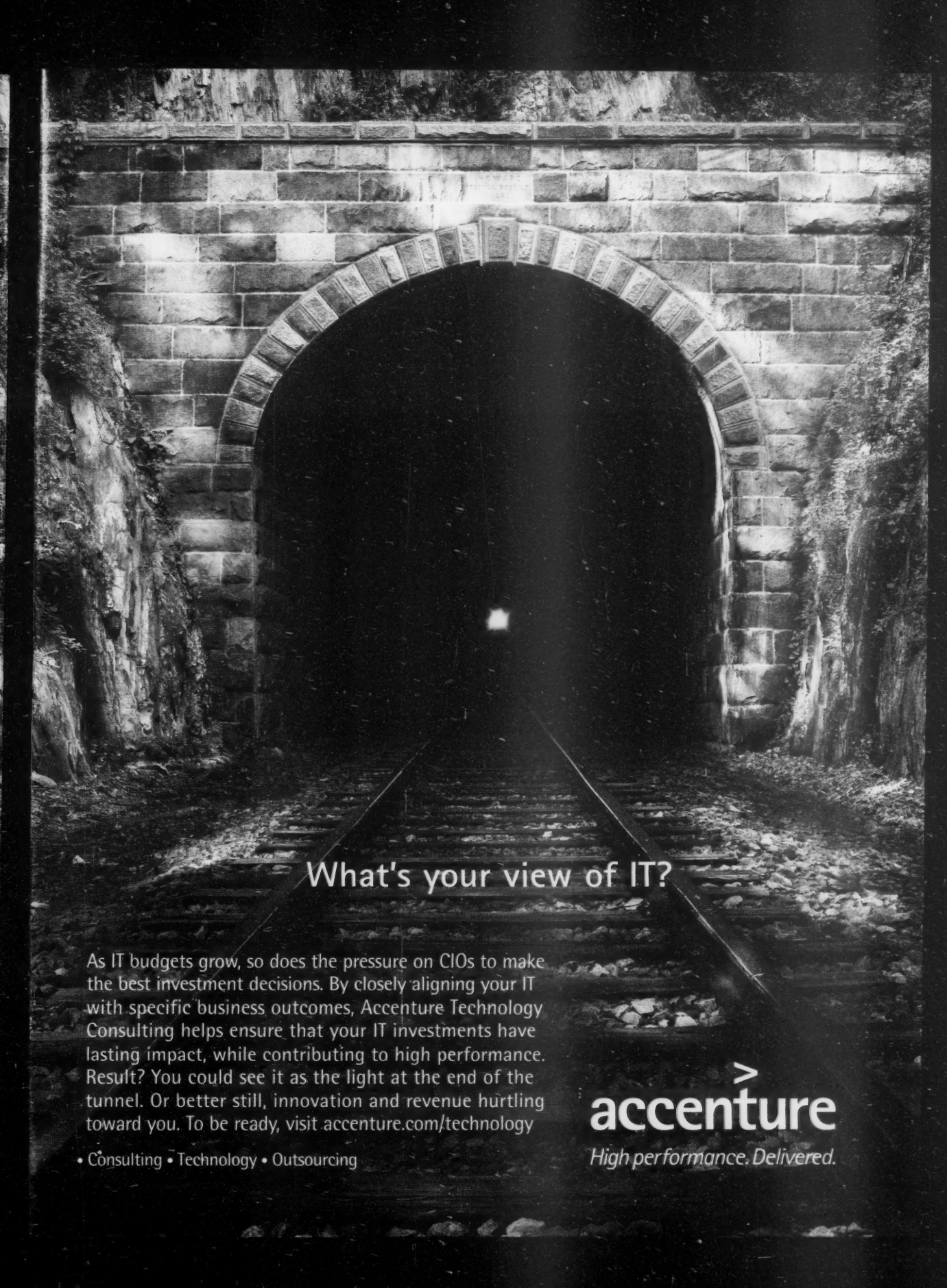
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Inside

COMPUTERWORLD ■ DECEMBER 10, 2007

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COMPUTERWORLD 100 PREMIER IT LEADERS 2008

Our annual awards program honors the men and women driving strategy and innovation in top-tier IT departments. This year's class is simplifying vendor relations, consolidating systems and streamlining IT infrastructure to transform their businesses. PAGE 23

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Editor's note: Don Tennant says that elite IT leaders know that the best career choice is to do the right thing for the right reasons.

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The following stories can be found at www.computerworld.com/08/p100.

CLASS OF 2008 YEARBOOK A photo gallery of this year's Premier 100 IT Leaders, along with interesting personal tidbits from the honorees themselves.

HONOR ROLL View the Premier 100 IT Leader alumni from 2000 to 2008.

NETWORK WITH THE BEST Join honorees and alumni at the ninth annual Premier 100 IT Leaders Conference, March 9-11, 2008, in Orlando. Visit www.premier100.com to register.

KNOW AN IT LEADER? Nominate that person for next year's list at www.computerworld.com/p100nominations09.

EDITORS' PICKS Have you been inspired to become an IT leader? Find career tips in *Computerworld*'s best stories on leadership and management.

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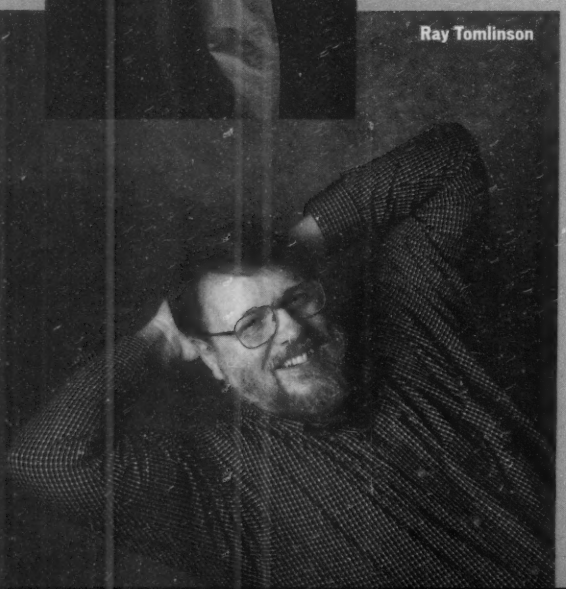
This Week Online

UNSUNG INNOVATORS: 10 People Who Shaped The Computer Industry

From the guy who thought up the Control-Alt-Delete combo for shutting down a PC safely to the inventor who put the @ sign in your e-mail address, we searched high and low for people we're betting you don't already know. Let us introduce you. And if you're itching to learn what some of the more famous folks are doing now, we caught up with seven tech giants, including Mitch Kapor, Dan Bricklin and Steve Wozniak, to find out about their newest ventures. computerworld.com/servers



Iranians Claim to Have Built Opteron-based Supercomputer

A high-performance computing research center in Tehran says on its Web site that it used AMD Opteron processors to build Iran's most powerful supercomputer. That raises questions about how the center might have obtained the chips, since U.S. trade sanctions bar the sale of U.S.-made computer technology to Iran. computerworld.com/hardware

Zune 2.0: Still Playing Catch-up

The second-generation Zune is the media player Microsoft should have released last year. It's a good product, but not a compelling one. computerworld.com/mobilewireless

Should Your Company 'Crowdsource' Its Next Project?

Crowdsourcing is the technique of taking a project and outsourcing it to a large group of people via an open call. It can also be a way to get free user feedback and satisfy consumers' demands. computerworld.com/outsourcing

Review Roundup: Invasion of The Ultrasmall Desktop PCs

The newest ultrasmall computers are good options in home and small offices where space is tight – if you can live with a few trade-offs. computerworld.com/hardware

Blog Spotlight

Where's Facebook's Ethical Beacon?

Mitch Betts is tired of Web 2.0 execs perpetrating massive privacy abuses – in a desperate bid to "monetize" the Web – and then issuing the Big Dramatic Apology. Here's his rant. http://blogs.computerworld.com/betts

SHARKBAIT BETA

I Adore Commodore 64

Everyone has a favorite first computer. Some hobbyists even still use them – but not everyone will write a song about them. Here's a boy band that did. http://sharkbait.computerworld.com/?q=node/1913

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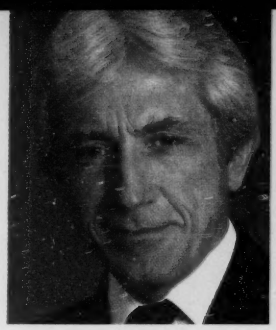
■ EDITOR'S NOTE

Don Tennant

The Rewards Will Follow



JUST LIKE talented, experienced people, even the best-managed and most highly regarded organizations can lose sight of priorities and goals and end up scrambling means and ends in the process. In the struggle to deal with the myriad conflicting demands that we as individuals and companies face, it's easy to find ourselves lapsing into priority drift.

That reality struck me last week as I was speaking with the president of an East Coast chapter of the American Society of Business Publication Editors (ASBPE), the professional organization that has honored *Computerworld* with dozens of awards over the years, including Magazine of the Year in 2004 and 2006 and Best Overall Web Publication in 2006. We were discussing an upcoming webinar I'm slated to participate in, the purpose of which is to inform our peers about the ASBPE awards program from the perspective of past recipients.

The organization had sent me a list of suggested discussion points, and I was surprised to see that one of the topics centered around these questions: "Does the publication or company develop specific editorial content with a view to winning awards? If so, what have been the results? Since entering award competitions, have you changed the way you develop editorial content and research, write or edit articles?"

I told the chapter president that the questions reflected a forgetfulness of purpose. I explained that our success lies in an approach that's based on serving the needs of our readers, which is the sole determiner of our editorial content. If we do that well, the awards and recognition will naturally follow.

Our exchange was still top of mind when I read this week's coverage of the remarkable men and women in the 2008 class of *Computerworld*'s Premier 100 IT Leaders. It also made me think about one of the judges who selected this year's class: Tony Caesar.

I first met Caesar, CIO of Head USA North America, at our Premier 100 conference two years ago. It was a chance encounter in which Caesar expressed his admiration for the men and women in the Premier 100 class of 2006. I have no doubt that from that moment on, he dreamed of walking across that stage and having that medal draped around his neck.

■ I guarantee you this: What got him there wasn't the goal of receiving a medal.

That dream came true just one year later, when Caesar was named to the 2007 class of Premier 100 IT Leaders. But I guarantee you this: What got him there wasn't the goal of receiving a medal. It was his determination to stay focused on the needs of his company and on serving his users. In his case, it was by means of shepherding a massive, game-altering warehouse-automation project. The honor was just a byproduct of the leadership and commitment that drove the undertaking.

This year's class shares that focus and commitment. They know that when you do the right things for the right reasons, the rewards will follow. And there's another dimension to that awareness that warrants our attention. It was articulated in a discussion I had recently with Silicon Valley veteran Bill Coleman, one of the founders of BEA Systems. Coleman made a sublime observation in explaining the approach of his newest venture, Cassatt Corp., a utility computing start-up. "What we found," he said, "is that ROI isn't a driver for people to make transformative changes."

Recognition of that verity is one of the secrets of the success of this year's class of Premier 100 IT Leaders. As Julia King writes in the anchor story of our package, "Without a doubt, streamlining IT saves companies big bucks. Yet cost savings aren't the primary force driving the IT simplification boom. What these and many other Premier 100 IT Leaders say they are striving for is nothing short of overall business transformation." Do the right things, and the ROI will follow.

All of us at *Computerworld* warmly congratulate this year's honorees for that maintenance of focus and for the accomplishments it yielded. Rewarding them was only natural. ■

Don Tennant *is editorial director of* Computerworld *and* InfoWorld. *Contact him at don_tennant@computerworld.com, and visit his blog at* http://blogs.computerworld.com/tennant.

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■ LETTERS

IT Can't Do It All

As we CIOs "push back" and clearly define the services we are able to effectively provide, one trend remains persistent: Turning non-IT staffers into knowledge workers ain't happenin'! Thus, as we become more dependent upon IT-related solutions, more of the productive functionality of the enterprise will continue to fall upon the shoulders of IT by default ["All of IT's Spinning Plates Are Falling," Opinion, Oct. 29].

We have these three choices, as I see it: 1) Continue with the status quo and embrace eventual burnout/heart failure, 2) find a way to develop the knowledge and skills of non-IT staffers, or 3) begin to absorb responsibility for full functionality of specific business functions within IT and optimize these processes.

I can't tell you which way this will go, but my broken plates are still full, and I'm pushing for option No. 2.
■ **Robert M. Walker,** *CISSP, assistant vice president for IT services, Missouri Southern State University, Joplin, Walker-R@mssu.edu*

Saying No, but Nicely

I've been through the "just say no" program with ITers who want a black-and-white answer ["No More Mr. Nice Guy," Opinion, Oct. 29]. Why, they wondered, can't we tell the customers "no" when it's a bad thing for the organization? Unfortunately, "no," often followed by "it's not our policy," comes across as rather final and harsh.

I finally got them agreeable to saying, "Yes, and . . . " (not "but"), followed by an explanation of the impact or cost of the request. We set a more positive tone by saying yes, and the customers appreciate the information about effects. Then they are able to decide whether the request is worth the cost or other effects, and if it isn't, they can back out graciously.

I support the concepts in the article. Same message, different words. As the author, Paul Ingevaldson, said, it's all in the presentation.
■ **Wendy Saadi,** *project manager, city of Mesa, Ariz., wendy.saadi@cityofmesa.org*

I'm not sure what part of the world Ingevaldson is referring to, but in many companies, IT is already notorious for just saying no. Business people are often cowed by IT professionals who appear to have little or no concern for the needs of their company's business. Instead of saying no, IT must align itself with the businesses they support to achieve a genuine sense of shared objectives and priorities. Without that alignment, IT risks being viewed as cumbersome and dysfunctional. With it, IT departments will be rightfully seen as the engines of their companies' efficiency and competitiveness.
■ **C.A. Bain,** *New York*

Déjà Vu With HP

The only operating systems that HP invented, MPE and subsequently MPE/iX for the HP 3000 platform, are also over 30 years old ["OpenVMS Still Has Road Ahead of It, HP Says," News, Nov. 5]. It is ironic that in 2001, a vice president from HP stood in front of an audience in Chicago's McCormick Place and said about MPE almost exactly what HP is saying about OpenVMS now. Some four months later, HP pulled the plug on its own invention.

Does OpenVMS have a future? Perhaps. Will those certified as professionals on OpenVMS have to challenge HP to maintain their standing, as MPE certified professionals did? Probably. Would I be concerned? Hell, yes!

It is ironic that in its 30th year of advocating to HP on behalf of HP customers, Interex filed for bankruptcy. In journalism, -30- means "the end." Does -30- mean the same for OpenVMS? Only time will tell.
■ **Chuck Ciesinski,** *senior Unix administrator, Frederick, Md.*

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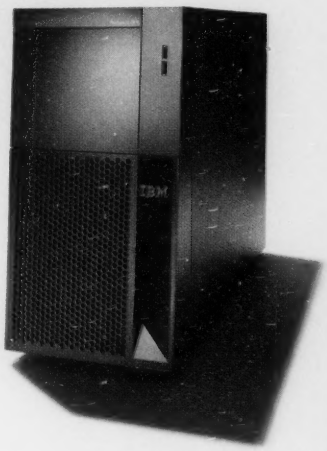

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News Digest

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THE WEEK AHEAD

MONDAY: The Computer History Museum in Mountain View, Calif., marks the 25th anniversary of the Commodore 64 with a panel discussion featuring Commodore International founder Jack Tramiel and Apple co-founder Steve Wozniak.

TUESDAY: The Securities Operations Forum holds a one-day conference in New York on data reconciliation and exceptions management. The Waters USA 2007 conference also takes place in New York; its agenda focuses on financial services IT issues.

GETTY IMAGES

PRIVACY

Facebook Fiasco May Lead to Closer Look at Online Privacy Issues

THE FIRESTORM of criticism that hit Facebook Inc.'s Beacon advertising service last week may, ironically, prove to be a positive development for the online privacy movement.

The Palo Alto, Calif.-based social networking company was forced to adjust the service Dec. 12, just days after CA Inc. researchers found that Beacon is far more invasive than advertised.

Launched in early November as part of the Facebook Ads program, Beacon by default tracks the activities of Facebook members on more than 44 participating Web sites and sends reports on those activities to the users' Facebook friends.

Stefan Berteau, a senior research engineer on CA's antispyware research team, said on Monday that Beacon is actually tracking the activities of both members and nonmembers on Facebook and its partner sites.

Complaints about CA's findings quickly prompted Facebook to allow users to fully turn off the system.

"This Facebook debacle is in one way very good, because it shows people just what is happening," said Pam Dixon, executive director of the World Privacy Forum in Cardiff by the Sea, Calif.

"There are other sites and other places where very similar data arrangements exist, but it is all happening under the radar," Dixon added.

In a statement, Facebook founder and CEO Mark Zuckerberg acknowledged the problems with the Beacon service.

"We simply did a bad job with this release, and I apologize for it," he said. "We've made a lot of mistakes building this feature, but we've made even more with how we've handled them."

Kathryn Montgomery, professor of communication at American University in Washington, said that Facebook's move to let users turn off Beacon will not radically change corporate online marketing strategies.

"These companies," she said, "are continuing full-steam ahead with a new generation of intrusive marketing practices based on unprecedented levels of data collection and personal profiling."

— Heather Havenstein and Jaikumar Vijayan, with Juan Carlos Perez of the IDG News Service

OPERATING SYSTEMS

Microsoft, Testing Firm Bicker Over Benchmark

MICROSOFT CORP. and a performance testing firm are trading barbs over the latter's claims that an upcoming update of Windows XP ran through a series of Office benchmarks about twice as fast as an early version of Windows Vista Service Pack 1 did.

Nick White, a Vista program manager at Microsoft, bashed the benchmarking by Devil Mountain Software Inc. in a blog posting, saying

Devil Mountain says its tests also showed that Vista SP1 isn't significantly faster than the first release of the operating system.

that the performance of the updates is still "a moving target" and that publishing the benchmark results now isn't "a worthwhile exercise."

But Craig Barth, Devil Mountain's chief technology officer, said the versions of the Vista and XP updates that his firm benchmarked were "fair game" for testing. "We don't have an agenda," he said. "We're just trying to get the information out there."

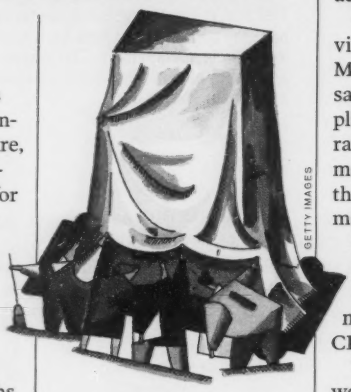
– GREGG KEIZER

SOFTWARE

SAP Unveils Web 2.0 Look for Its CRM Tool

BOSTON

SAP AG, looking to reduce the complexity of its customer relationship management software, last week unveiled an upgrade that adds support for Web 2.0-style user interfaces.



GETTY IMAGES

Bob Stutz, president and general manager of global strategy and product development at SAP, said developers spent more than 18 months interviewing users of its CRM software at 100 large companies to determine how best to use Web-style interfaces.

"We're trying to bridge the gap between a cool, user-driven Web application and an enterprise software application," said Stefan Haenisch, vice president of CRM product management at SAP.

Stutz described the upgraded CRM 2007 offering, introduced at a press conference at the company's SAP Influencer Summit here, as "comparable" to Google Inc.'s iGoogle personalized portal application.

Ray Wang, an analyst at Forrester Research Inc., said the upgrade improves the product's user interface, but he added that it still pales in comparison with the latest CRM offerings from Oracle Corp., Microsoft Corp. and Salesforce.com Inc.

"What [SAP] has built is a great start, but I think some of the work we've seen from Oracle in terms of visualization and [other capabilities] is much more Web 2.0-centric," Wang said. "We've seen things from Oracle that really take advantage of that."

David Macauley, senior vice president of CRM at Munich-based Siemens AG, said his firm plans to replace more than 500 separate customer relationship management systems with the SAP CRM software by mid-2008.

The consolidation is part of the company's decision to take a "much more serious" view of CRM technology, he said.

"The Web user interface would definitely attract users as opposed to repel them, which was the case before," Macauley said. "The more flexible you can make a system, the more beneficial it is to doing your daily work."

He noted that Siemens plans to complete the first phase of the SAP upgrade in mid-2008.

Stutz said the CRM 2007 software is now available in packaged and hosted versions. He declined to disclose pricing for the upgrade.

— Brian Fonseca

Short Takes

Advanced Micro Devices Inc. again delayed volume shipments of its quad-core Opteron processors after finding a bug on the chip's Level 3 memory cache that caused system problems. The chip is now slated to ship early next year, a few months later than expected.

Microsoft Corp. has rescheduled its postponed Professional Developers Conference to late October 2008. In May, the company canceled the October 2007 conference to allow for further development of 2008 versions of Windows Server, SQL Server and Visual Studio.

About 1,400 Duke University School of Law applicants have been warned that their Social Security numbers may have been stolen after hackers gained access to data on the school's Web site. The incident was discovered early this month.

Microsoft has acquired Seattle start-up WebFives, a provider of Web-based file-sharing services for Internet and mobile video, photos, audio and blogs.

BIOTECHNOLOGY

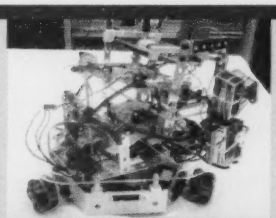
Moth-based Robot May Lead to 'Hybrid' Computers

A scientist who successfully connected a moth's brain to a robot predicts that "hybrid" computers running a combination of technology and living organic tissue will be available in 10 to 15 years.

The move to use the moth came after Charles Higgins, an associate professor at the University of Arizona in Tucson, estimated the cost of building a computer chip that could process visual images like a brain can.

Each chip, he said, would likely cost $60,000 to build. "At that price, I thought I was getting lower quality than if I was just accessing the brain of an insect, which costs, well, considerably less," he added.

The organically guided, 12-inch-tall moth-based robot on wheels may be pushing the technology envelope today, but it's just the seed of what can be done when combining living tissue with computer components, Higgins said.



The robot is guided by the brain and eyes of a moth.

"Computers now are . . . not good at being flexible or interacting with other users," he said. "There may be some way to use biological computing to actually make our computers seem more intelligent."

Higgins noted that he has no plans to "hook up primate brains to a robot."

"There's the possibility," he added, "when you start to tap into brains, for all sorts of evil applications."

– SHARON GAUDIN

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IT WORKFORCE

H-1B Cap Issue Gets Aired In Iowa as Caucuses Near

REUTERS/JASON REED

» Hillary Clinton and her fellow candidates are hearing Iowans' views on H-1B visas.

GARY SCHOLTEN, CIO at Principal Financial Group Inc. in Des Moines, has met with three of the Democratic presidential candidates who are campaigning in Iowa as the state's Jan. 3 caucus approaches. Candidates often visit Principal's offices, giving Scholten a chance to relate his IT workforce concerns directly to them.

Scholten said last week that he wants to see improvements in science and technology education and changes in U.S. immigration policies. Although Principal has hired foreign IT workers with H-1B visas in the past, it hasn't done so recently because of increased competition for the available visas.

But Scholten said he's more concerned about the impact that the annual visa cap has on smaller businesses. "The entrepreneurial companies are going to be hurt first, and that's where a lot of the economic growth comes from," he said.

On the other side of the debate is Dante Vignaroli, a mainframe developer for more than 30 years who says that he lost his job to an H-1B worker in 1999. Since then, he has mostly done contract work.

The candidates aren't knocking on Vignaroli's door, but that isn't stopping him from trying to meet with them to talk about the effects of the H-1B program on workers like him. "You don't just lose your job," he said. "It's like your whole country betrays you."

— Patrick Thibodeau

BETWEEN THE LINES *By John Klossner*

BENCHMARKS LAST WEEK

Novell Inc. postponed its fourth-quarter earnings report because of a review of its accounting practices by the U.S. Securities and Exchange Commission. Novell defended itself and said it delayed the results out of "an abundance of caution."

AT&T Inc. announced that it will phase out all of its public pay phones by the end of next year. The company said the growth of cell phone usage played a big role in its decision.

50 YEARS AGO: The first public air-to-ground telephone call was made from a commercial airliner.

Global Dispatches

IBM Says Asustek Violates Its Patents

TAIPEI – IBM has filed a trade complaint charging that Taipei-based motherboard maker Asustek Computer Inc. infringed three of its patents.

IBM has asked the U.S. International Trade Commission to bar Asustek and its North American subsidiary, Asus Computer International Inc., from importing equipment that uses PC power supplies, cooling fans and clustering technologies into the U.S. IBM contends that those technologies are related to the patents.

An IBM spokesman said a licensing agreement between the two companies expired in 2004, and attempts to renew the contract have so far failed.

An Asus spokesman couldn't be reached for comment.
Grant Gross,
IDG News Service

AMD Opens New Indian R&D Facility

BANGALORE, INDIA – Advanced Micro Devices Inc. late last month opened a 52,000-square-foot research and development facility here.

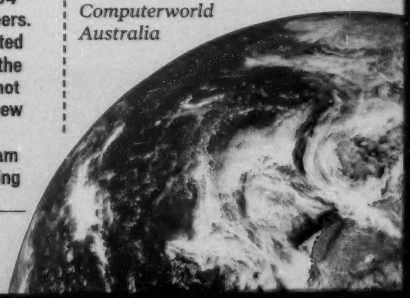
The new building replaces a three-year-old, $5 million, 38,000-square-foot facility that will now house AMD's Bangalore sales, marketing and administration staff.

AMD's first India Engineering Center opened in 2004 with a team of 40 engineers. The new facility is expected to house 120 engineers, the company said. AMD did not disclose the cost of the new building.

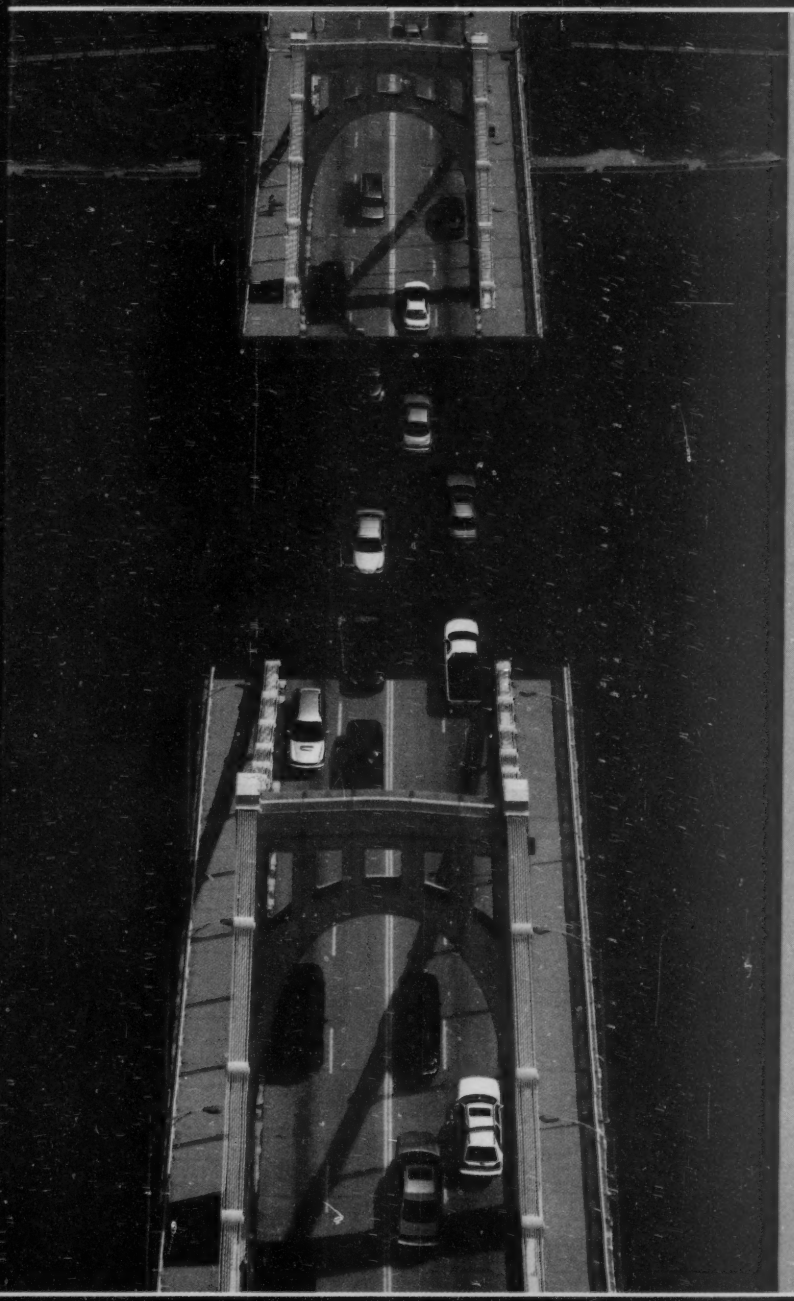
The Bangalore R&D team includes engineers working on Shanghai, a 45-nanometer quad-core server processor slated to be released in mid-2008. The same team had previously worked on the development of Sunnyvale, Calif.-based AMD's quad-core Opteron processor, code-named Barcelona.
Sumner Lemon,
IDG News Service

BRIEFLY NOTED

Tokyo-based Fujitsu Ltd. said it will open a new software development center in Adelaide, Australia. The operation is expected to employ 200 people within two years.
Sandra Rossi,
Computerworld Australia



WHEN INFORMATION AVAILABILITY MATTERS



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Windows, Linux Servers Chip Away at Unix

The operating system mix in data centers is changing, and Unix revenues are dropping — but only slowly. By Patrick Thibodeau

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IN GARTNER INC.'S forecast for the server operating systems market, there's nothing listed under the category of emerging products. And although the market is by no means static, the pace of change inside many corporate data centers is slow.

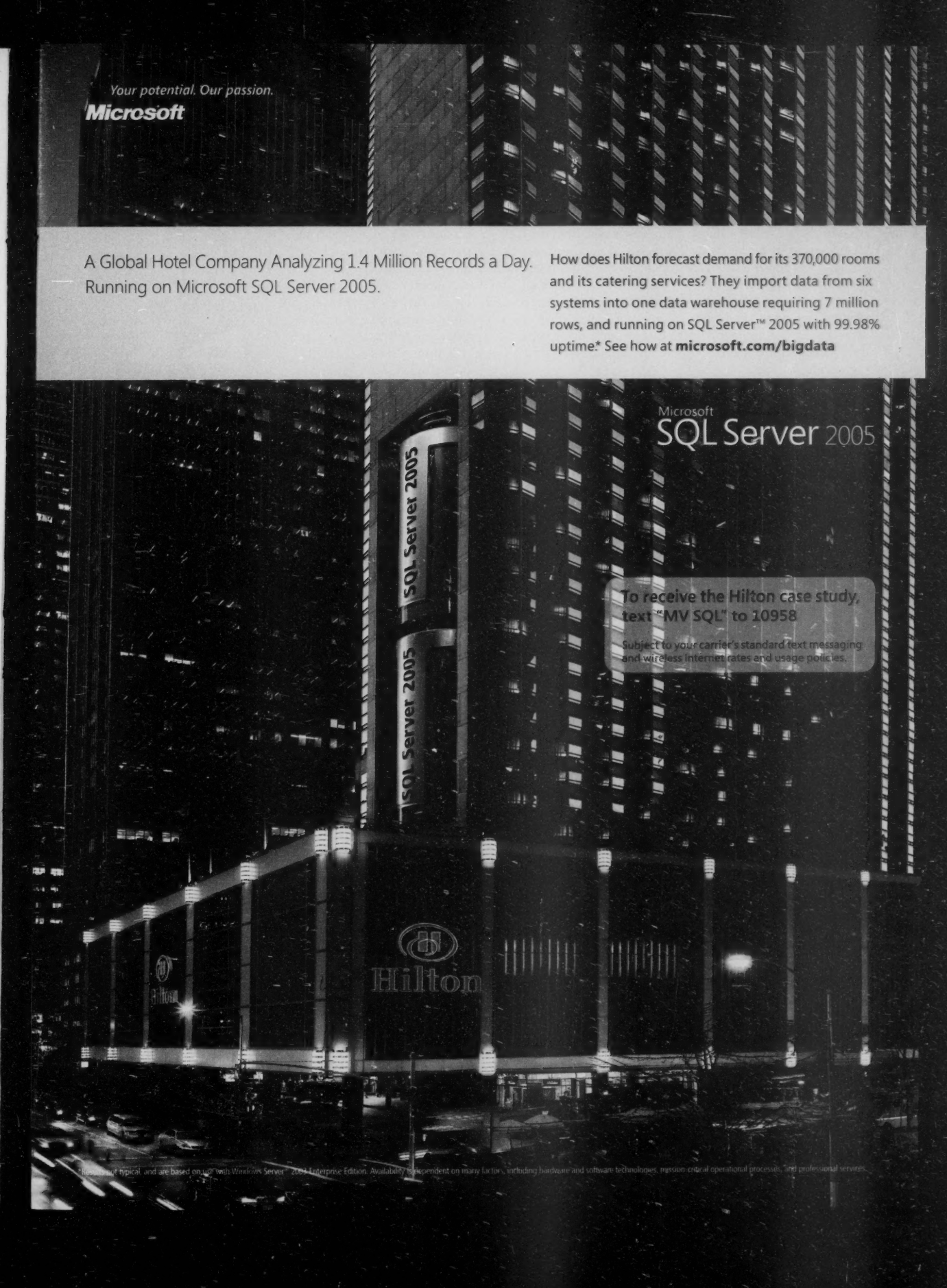
Windows and Linux are growing both in terms of importance and in terms of the number of installations within data centers, eroding Unix's share of the server operating systems market, Gartner analysts said at the consulting firm's annual data center conference in Las Vegas late last month.

But the decline of Unix is happening at a glacial pace: Gartner predicts that worldwide Unix server revenue will drop from $16.4 billion this year to $16 billion in 2012. That's partly because a push by IT managers to reduce the number of operating systems they need to support may not be as easy to pull off as it sounds.

Frank Muller, senior director of technology and infrastructure support at HealthPartners Inc. in Bloomington, Minn., is among the users with an IT simplification mind-set. And there's a good reason for that: HealthPartners, a not-for-profit health care organization with about 640,000 members in Minnesota and four other states, runs the AIX and HP-UX derivatives of Unix as well as Windows, Linux and a mainframe system in its data center.

About 18 months ago, when Muller asked the developer of one application that was running on Hewlett-Packard Co.'s HP-UX to port it to IBM's AIX, the software vendor complied with the request.

Continued on page 18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*Results are typical, and are based on use with Windows Server™ 2003 Enterprise Edition. Availability is dependent on many factors, including hardware and software technologies, mission-critical operational processes, and professional services.

Continued from page 16

But Muller said he recently moved the application back to HP-UX because he couldn't get a commitment from the developer for long-term support of the software on AIX. "If the vendor isn't there from an application point of view, I don't think you'll make much headway" on reducing the number of operating systems used in data centers, he said.

In an electronic poll during one session at the data center conference, attendees were asked about their server operating system plans. Of those who responded, about 40% said they were reducing the number of supported operating systems in their data centers. An equal percentage said they were maintaining the current mix, while the remaining 20% said they planned to add new operating systems.

In general, Gartner analyst John Enck said, users "want less complexity, and [they] want fewer operating systems." But he added that for now, at least, the major vendors of Unix machines — HP, IBM and Sun Microsystems Inc. — continue to sell plenty of servers based on that operating system.

"Nobody is achieving great growth, but nobody is dying," Enck said. "There is stability."

In contrast, sales of Windows and Linux servers are on the increase, thanks to the growing use of x86-based systems for workloads that were once handled by Unix machines built around the hardware vendors' own RISC processors. According to Gartner's market forecast, Windows server sales will total $19.6 billion this year and rise to $22.2 billion by 2012. The firm predicts that sales of Linux-based machines will grow from $8.6 billion to $12.2 billion over the same period.

Gartner expects the total market for server operating systems this year to be just over $54 billion, which includes $9.5 billion from an "other" category that encompasses technologies such as OpenVMS, NetWare, mainframe operating systems and older versions of Unix.

NO RUSH TO SIMPLIFY

As Muller's experience at HealthPartners demonstrates, applications are a big reason why data centers likely will continue to support a variety of operating systems. It's not only because vendors may be reluctant to support their applications on some operating systems. It's also the consequence of users wanting to match their processing workloads to the best technology for the job at hand.

In addition, some IT managers said that cutting Unix out of the picture could hurt users in the long run.

For instance, Jerry Cohen, director of IT at a large company that he asked not be identified, said that too much data center simplification could stifle the impetus for innovation among vendors. Cohen added that if a company standardizes on a single operating system, "your IT shop becomes status quo for eternity, and that will never drive the price down."

Also curbing the desire to simplify data center installations is the fact that server vendors now offer multiple operating systems on common chip architectures, making hardware support less complex for users.

As an example, IBM's System i hardware line, which features the i5/OS operating system, now uses the same Power processors as the company's System p Unix servers do. And HP offers HP-UX as well as OpenVMS and its NonStop fault-tolerant operating system on servers based on Intel Corp.'s Itanium processors.

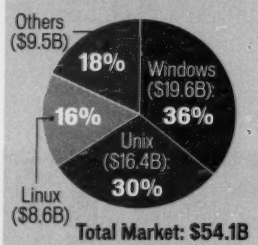
For now, the relative stability among server operating systems is a fact of life for Kevin Piombo, manager of a Windows hosting environment for the California Department of Technology Services. The DTS provides IT hosting services for other California agencies, and its data center supports a broad range of operating systems.

There is "a lot of business need for specific platforms, and a lot of legacy applications that people don't have the time or money to [replace]," Piombo said.

He added that maintaining technologies such as IBM's MVS mainframe operating system creates another set of issues — namely, finding enough people to handle the system operation duties. Many of the MVS operations personnel at the DTS are retiring, said Piombo, who thinks that the IT agency will have to hire a third-party firm to manage its mainframes in the future. ■

Data Center Division

Projected 2007 market share of server operating systems, based on worldwide server sales



SOURCE: GARTNER INC.

IT Execs Eye Virtual Path

LAS VEGAS

Server virtualization is where Linux was five years ago inside data centers. IT managers said at the Gartner data center conference here that they're investigating or testing virtualization software – and in some cases, already expanding their use of it.

For instance, Reid Engstrom, director of shared technical services at Harley-Davidson Inc., said the Milwaukee-based motorcycle maker is using virtualization to combine hundreds of servers that previously had utilization rates of only about 5% onto a smaller number of physical systems.

That is speeding up application provisioning and making it possible to shift workloads between servers as needed. "We're more flexible," Engstrom said.

Some end users are "very uncomfortable at first" with a shared-application environment, he cautioned. But, he added, the IT staff is winning them over by "building up some good success stories."

David Salbego, manager of Unix and operations services at the Argonne National Laboratory in Argonne, Ill., agreed with the bullish assessments of virtualization's potential. "I think it's going to be even bigger than it is today," Salbego said. "Suddenly, the operating system is no longer a barrier to how you manage things."

– PATRICK THIBODEAU

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Microsoft Bows to Users on OS Checks

Complaints by IT execs prod the vendor to kill the 'kill switch' in Vista and Windows Server 2008. By Eric Lai and Elizabeth Montalbano

MICROSOFT CORP. last week said it's removing the so-called antipiracy kill switch from Windows Vista and Windows Server 2008 — a decision driven by complaints from IT managers about the prospect of systems suddenly being unable to function properly.

The first release of Windows Vista goes into a reduced-functionality mode if it isn't activated via a valid software license key within 30 days of being installed on a PC, or if it gets fingered as counterfeit software by Microsoft's Windows Genuine Advantage (WGA) activation and validation system.

But in the Service Pack 1 (SP1) update to Vista, due in next year's first quarter, Microsoft will replace the reduced-functionality mechanism with a less harsh one. Under the new approach, users flagged by WGA will see recurring pop-up windows reminding them that they need to activate Vista or buy valid copies of the software.

Microsoft said it will use the same technique in Windows Server 2008, which is scheduled to be launched in late February. Last week, the company issued Release Candidate 1 versions of both Vista SP1 and Windows Server 2008, one of the last steps before it clears them for manufacturing.

As is often the case with Microsoft products, many corporate customers are waiting for Vista SP1 before they start upgrading their PCs. Alex Kochis, Microsoft's senior product manager for WGA, said negative feedback from such users prompted the software vendor to do away with the reduced-functionality mode.

"In some cases, it was a simple reaction to [the] concept, as in, 'We don't like this,' " Kochis said. IT managers voiced concerns that business activities would be hampered if PCs stopped working because of activation or validation problems, he noted. Some also said they were worried about the complexity of successfully activating a large number of end users on Vista at once.

GETTY IMAGES

John LaBrue, operating systems administrator at OGE Energy Corp. in Oklahoma City, said that WGA has erroneously branded a few of OGE's copies of Vista as pirated software. That's one of the reasons why the utility and pipeline operator has been hesitant to deploy the new operating system, LaBrue said. Only about 100 of OGE's 3,000 PCs are running Vista at this point.

Jim Prevo, CIO at Green Mountain Coffee Roasters Inc. in Waterbury, Vt., said via e-mail that Microsoft's decision to eliminate the reduced-functionality penalty is a positive step. "Enterprise users like us face major challenges in deploying, maintaining, securing, upgrading and retiring applications and [IT equipment]," he wrote. "Anytime a critical supplier can make our job easier or more predictable, it's helpful for us."

On the other hand, Prevo added, Microsoft deserves to be fairly compensated for its software and has the right to protect its intellectual property. "I empathize with Microsoft's position and fully appreciate why they would try to deploy more rigorous enforcement [measures]," he wrote. "It's all a balancing act."

Kochis claimed that the license-validation checks and Microsoft's broader antipiracy efforts are working: The rate of piracy on Vista is half what it was on Windows XP during the same stage of that operating system's life cycle, he said.

But LaBrue, for one, still has issues with Microsoft's antipiracy mechanisms. He also cited concerns about the complexity and potential liability of using Microsoft's key management service (KMS) software, a volume-activation technology aimed at large customers. LaBrue said that killing off the reduced-functionality mode in Vista "doesn't really make KMS more attractive." ■

Montalbano *writes for the IDG News Service.*

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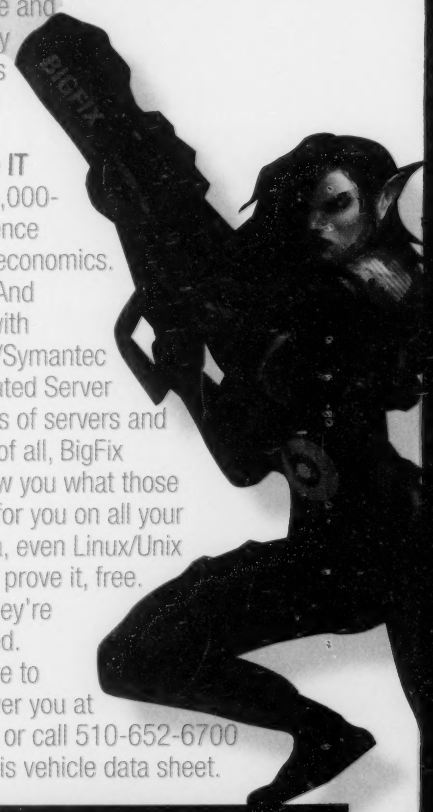

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TRBA

COMPUTERWORLD

Premier 100 IT Leaders 2008

They're simplifying IT and showing the business how to innovate. By Julia King

Toshiba, IBM, Hewlett-Packard, Sony, Compaq. Name any vendor, and five years ago, Constellation Energy had its computing hardware. The same was true for software and business processes. At one point, the Baltimore-based company had at least 19 different IT purchasing processes. Today, says CTO Wynne Hayes, it has just one. »

Continued on page 27

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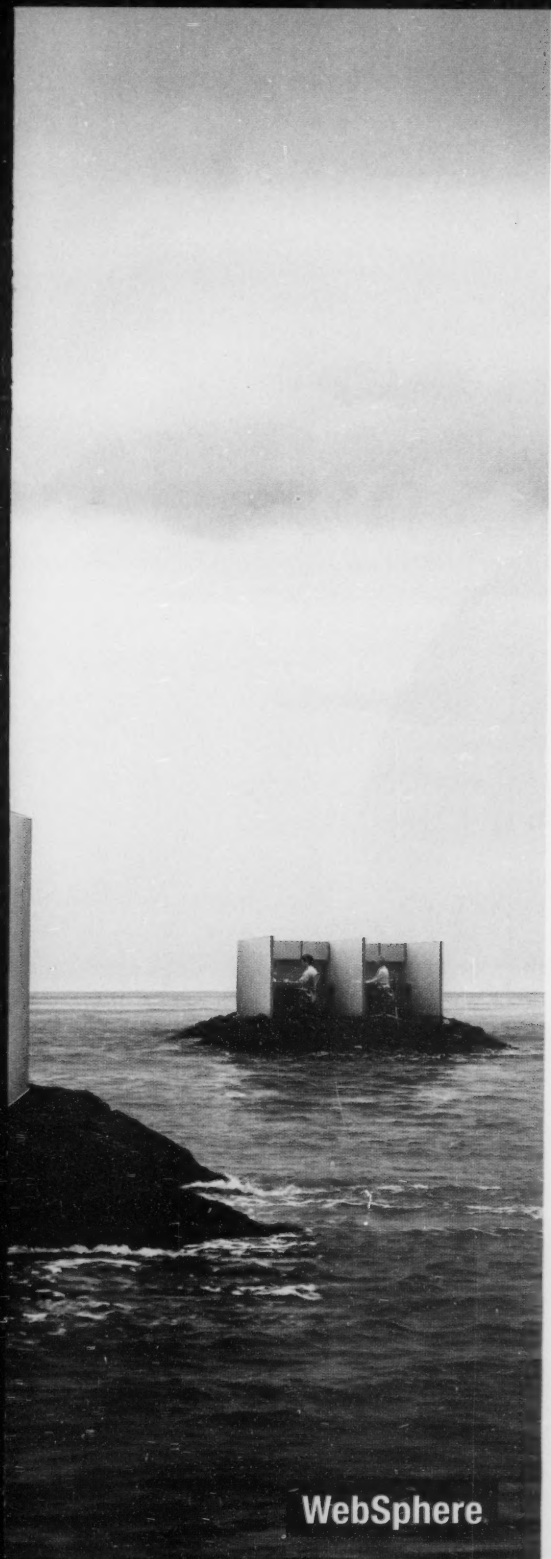

_INFRASTRUCTURE LOG

_DAY 84: Feeling really disconnected. We're not getting the most out of our existing assets. Service and application integration is a nightmare. Our connections are restrictive. We've got to stop working on these islands.

_Please rescue me from this lack of connectivity.

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The idea is to take the repetitive things and make them standard so that we can add value.
WYNNE HAYES, CTO, CONSTELLATION ENERGY GROUP INC.

Continued from page 23

At DreamWorks Animation SKG Inc., artists used to be confined to working only on projects under way at their own sites. But the big IT initiative this year has been consolidating a sprawling infrastructure into a single, virtual computing cluster. Now, digital artists can work on multiple projects regardless of their geographic location.

And at Verizon Wireless, running more than a dozen billing systems had made it impossible to offer all customers the same products and services and a consistent level of support. But this year, the company winnowed its 13 billing systems to a single one that supports 62 million customers and 30,000 call center agents across the country.

The project is in line with CIO Ajay Waghray's "less is more" philosophy and the latest in his long-term drive to streamline all IT at the $38 billion company. One major benefit: Having a single billing system reduces operating costs by 15% to 20%, saving Verizon a whopping $20 million a year.

Without a doubt, streamlining IT saves companies big bucks. Yet cost savings aren't the primary force driving the IT simplification boom. What these and many other Premier 100 IT Leaders say they are striving for is nothing short of overall business transformation. Simplifying vendor relations, consolidating systems and streamlining IT infrastructure clears a direct path to business process innovations, consistent operational excellence and overall market agility.

"The idea is to take the repetitive things and make them standard so that we can add value," says Constellation Energy Group Inc.'s Hayes, 45. For example, by standardizing purchasing processes, "we can move buyers around, and they can learn about buying different commodities. We can also move business people around, and they don't have to learn a whole new set of rules each time they move," she says. "We definitely have become much more productive and much more agile from a business perspective."

Hayes herself is an example. Prior to moving into her current post as chief technology officer of corporate applications, she served as CIO at Constellation Generation Group LLC.

PHOTO BY CHRIS HARTLOVE

REMOVING THE RED TAPE

At Corporate Express US Inc., a $5 billion supplier of computer and office supplies in Broomfield, Colo., the mandate to streamline came from the top.

"Our CEO came out with a tag line to 'simplify and sell' as a way to motivate the whole organization to eliminate overhead and tasks that don't really contribute to our customers' experience and are really just more red tape," explains Doug LaVelle, 42, director of business relationship management. LaVelle's group of business relationship managers was established as the sole point of contact between IT and the company's business functions.

DOUG LAVELLE, DIRECTOR OF BUSINESS RELATIONSHIP MANAGEMENT, CORPORATE EXPRESS US INC.

> **"We're trying to eliminate the business [units] having to understand the structure and organization of IT and find their way to the right person to help with their problem.**

"We're trying to eliminate the business [units] having to understand the structure and organization of IT and find their way to the right person to help with their problem," LaVelle says. Relationship managers work with the business people to streamline processes and ascertain their technology requirements. After that, they work one-on-one with software developers and IT architects in the IT organization.

"We sit in on weekly team meetings in operations, finance and sales, and we sit in on their meetings with their directors and senior executives to understand their strategic needs," LaVelle explains. "We're also responsible for building out the strategic road map. We understand where finance and sales and operations all want to go, so we bring that together in the [IT architecture]."

When Corporate Express acquired two companies in 2006 to expand into the facilities supplies market, the business relationship management group reduced a huge, multimillion-dollar business-IT integration program of 30 projects to 15 core programs.

"The key success of the program was that we were able to go back and spend additional time analyzing the requirements, benefits and efforts with both the business and IS stakeholders," LaVelle says. "This resulted in our senior leadership being presented with a roughly 50% reduced scope while still delivering the core business needs," all of which worked to integrate the new businesses much more quickly.

OPTIMIZING PROCESSES

At Verizon Wireless, Waghray, 45, maintains that IT simplification has to start with business process simplification — by far the greater challenge.

Consolidating 13 billing systems "sounds like a huge technical challenge," he says. "But the overriding thing was always to align with the business goals, which above all else is to provide customers with a consistent experience."

In addition to moving to a single system, the company had to set up a single billing organization to replace two billing departments. Legacies from two premerger companies, those departments operated under different management styles and used different development processes.

"The key is innovating and optimizing business processes," says Waghray, and he set out to do that under an aggressive timeline of 12 to 18 months. He formed teams from the two billing groups to compare methodologies and processes, and he incorporated the best practices into the new organization.

Waghray also met with department directors every two weeks to plan and evolve the new organizational structure. That included assigning employees to teams based on their skills, potential and interests. As one of the final decision-makers, he also participated in weekly calls to ensure timely decisions and full alignment between

Continued on page 30

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WYNNE HAYES, CTO, CONSTELLATION ENERGY GROUP INC.

Continued from page 23

At DreamWorks Animation SKG Inc., artists used to be confined to working only on projects under way at their own sites. But the big IT initiative this year has been consolidating a sprawling infrastructure into a single, virtual computing cluster. Now, digital artists can work on multiple projects regardless of their geographic location.

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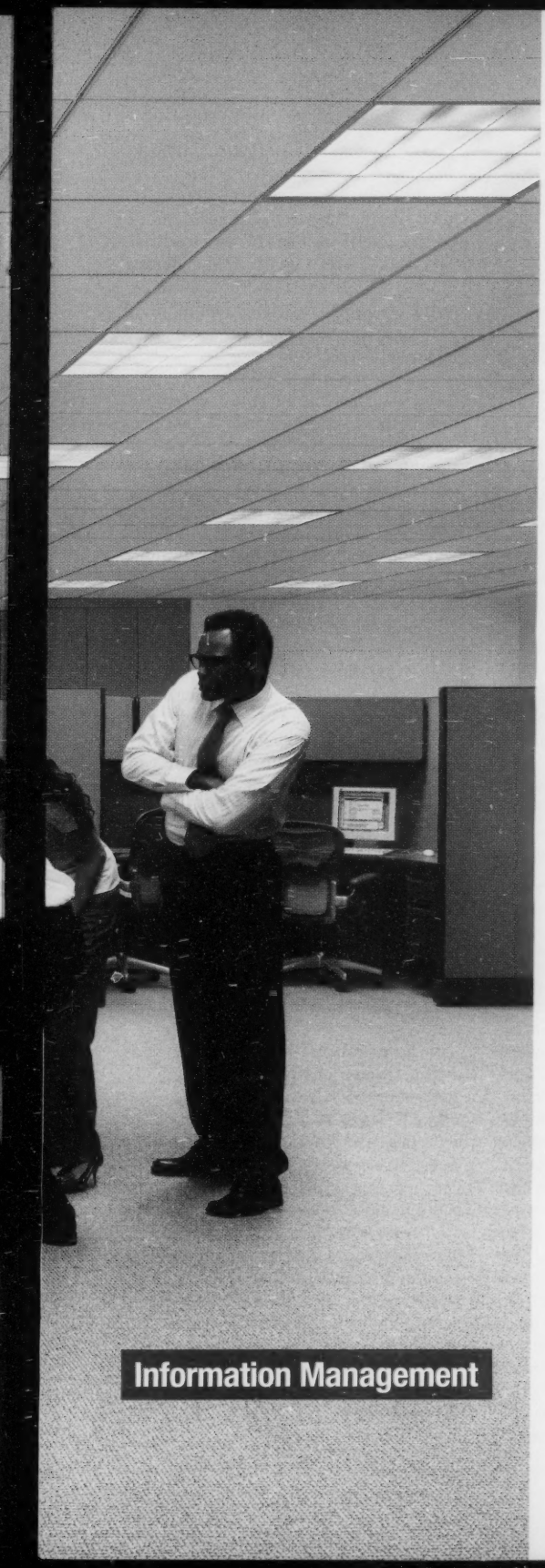

Information Management

_INFRASTRUCTURE LOG

_DAY 69: All we need is one specific piece of info. Gil almost had it, but his hand cramped. How are we supposed to find trusted business info when these massive volumes of disparate, conflicting information keep pouring in?

_Gil just grabbed a stuffed panda.

_DAY 71: The answer: IBM solutions for leveraging information. Now we can cleanse info and standardize source data fields for consistency and accuracy. I can create a single, comprehensive and accurate record of info across our source systems. Finally, I can provide a unified, trusted view of our information so everyone can make better decisions.

_Our view of our data is now scalable. Just in time—I think we ran out of quarters.

Download the Innovation and Competitive Advantage white paper:
IBM.COM/**TAKEBACKCONTROL**/ACCURATE

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IT and the business.

"The whole thinking was that less is more. That means fewer applications to manage, fewer rules of engagement, fewer touch points for customers," Waghray says. "Billing systems are the keepers of all of the customer data and rules of engagement. To simplify the customer experience, you've got to simplify what you're servicing."

The business benefit associated with a single system serving millions of subscribers is "amazing," Waghray says. "You can roll out products and services much quicker. As you optimize consolidation, it makes fault tolerance and high availability easier, too. And it allows for easy and consistent customer experience," because regardless of how a customer contacts the company — via a cell phone, online or in person — the same back-end computer system services all requests, he says.

MORE MOVIES, FASTER

At DreamWorks, streamlining IT to create a single virtual studio environment enables the company to roll out new movies faster than competitors.

"Before, we could release about two pictures every year or so," says Derek Chan, 36, head of digital operations at DreamWorks. "Now, we're doing a show in May, another in November and then [again the next] May. We're reaching a scale no one else has been able to do. When we ended up building these systems, it changed the landscape for us."

DEREK CHAN, HEAD OF DIGITAL OPERATIONS, DREAMWORKS ANIMATION SKG INC.

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The multiyear IT overhaul included deploying new HP Halo telepresence suites for cross-site collaboration, increasing WAN bandwidth threefold and delivering new storage technology to mitigate latency between sites.

Chan's leadership abilities contributed significantly to the project's success. He served as one of two executive sponsors for the project and shepherded it from inception to requirements gathering to design and implementation.

"We met weekly with the team to discuss progress and review project details. It was our responsibility to prioritize projects and communicate with other executives and production teams," Chan says. The teams that handled the audiovisual equipment as well as the networking core and WAN capabilities were both part of the digital operations department.

Chan says he is also measuring the success of the project based on the ability to have any artist work on any show, the number and types of artists who work cross-site, the amount of cross-site computing that IT can support in terms of CPU cores, and the relative number of infrastructure support people to the number of overall users and films. "All of these metrics have shown significant improvements since the beginning of the project," Chan says.

The biggest challenge has been making all of the IT upgrades while active

New Roles for IT Leaders

Environmental steward, revenue generator, holistic business expert and change management architect are just a few of the new roles today's IT leaders are taking on at their organizations.

"I am no longer being asked to provide computers and software," says Matthew Kesner, CTO at Fenwick & West. "I am being asked to work directly with firm clients, drive revenue, create market differentiators and automate business processes."

Derek Chan, head of digital operations at DreamWorks, is one of his company's primary environmental advisers and power-efficiency experts.

"Understanding the environmental impact of the choices we make is something that has gained prominence in recent years," Chan says. "Power consumption and efficiency are such global concerns these days, and technology is such a significant user of resources, it is imperative to establish best practices and continue efforts to be as efficient as possible." For example, DreamWorks has worked with the U.S. Department of Energy to analyze its data center efficiency and is pushing its vendors for more-efficient power supplies.

Wynne Hayes, CTO at Constellation Energy, includes change management – specifically, people change management – among her expanded areas of responsibility. She says one of the goals of standardizing technology is to make it possible for employees to more easily change roles or move across departments within the company and not have to learn an entirely new set of computer systems when they do move.

Verizon Wireless CIO Ajay Waghray chalks up the many changes in his role as top IT executive to the extremely fast pace of innovation in the wireless industry. "Even up to a few years ago, many CIOs could get away with supporting the way things have always been done," he says.

Now, "I need a deeper understanding of the business. Staying current with industry developments and maintaining my understanding of business operations are both essential," Waghray says. "More of my time is spent thinking of ways to make our systems more seamless with the business processes they support. Over these past few years, the focus of IT has shifted more and more to the user. It seems the unstated goal of IT is to design systems that are digital extensions of the departments they serve, rather than just tools they use."

– JULIA KING

production continues. "It's sort of akin to changing the wheels on a car while the car is moving," says Chan.

But the business has come to expect nothing less from IT, he adds.

"Our CEO has always pushed for innovation. They expect it and have become used to technology solutions that enable the artists to use their creativity," he says. "We want to take technology out of the way and give them solutions that allow them to create things that people haven't seen on-screen ever before."

PUSHING BEYOND BOUNDARIES

Michael Carlson, 44, CIO at Xcel Energy Inc., has been heavily involved in analyzing and optimizing business processes since moving into the top IT position at the Minneapolis-based electric and natural gas utility two years ago. His initial focus was to vertically integrate internal processes and systems for field operations, logistics and inventory management.

Now, the innovation push is on horizontally integrating and optimizing systems and processes across partner companies to develop and deploy a system known as SmartGrid. Relying on networking and messaging technology, SmartGrid will support a broad array of processes involved in everything from power plant and power distribution activities to providing consumers with analytic tools so they can proactively monitor and individually control their power consumption.

Carlson, who is leading the cross-functional SmartGrid team, says Xcel has lined up a handful of partners willing to jointly invest in the new business model. "We expect to have all of our partners on board by the end of the year, and we'll actually start building out a [prototype] smart village over the next 18 months, through 2009," he says.

Carlson's conviction that all technology projects must be set up on a value-based model is clearly evident when he talks about the SmartGrid project. Also evident is his commitment to knowing the utility business inside out.

"For an IT organization to be an effective business partner, it must maintain and expand its understanding of the business operations and how the technology is being leveraged and

MICHAEL CARLSON, CIO, XCEL ENERGY INC.

"We've stretched to where the next step has to be the application of IT.

relied on to deliver consistent and reliable business process," he says.

"If you think about it, the Wright brothers couldn't fly a plane today [because of all the computerization and onboard electronics], but Edison could show up more than 100 years after the development of electricity and run a utility grid," Carlson says. "We've stretched to where the next step has to be the application of IT."

BROADENING THE BUSINESS

Tapping IT to help streamline communication with clients led to the launch of a major new practice at Fenwick & West LLP, a 530-person law firm in Mountain View, Calif. CTO Matthew Kesner is co-leader of the new information management group, which grew out of a successful IT project known as the computer forensics investigations unit. The unit was started in response to a client's request for help in managing electronic discovery for a lawsuit. The other party involved in the suit had produced the equivalent of 50 million pages of files, which Fenwick & West's client couldn't afford to duplicate.

That's when Kesner and his team stepped in. Using a variety of off-the-shelf tools, the forensics unit developed a custom process called FIND to cull through reams of data and provide only the most relevant documents to the attorneys for review. Over the course of the case, the team handled the largest known collection of electronic discovery in any civil matter — the equivalent of 180 million pieces of paper, according to Kesner. Five weeks into the trial, the opposing party conceded, paying Fenwick & West's client $400 million to settle the case.

Since then, Kesner's team has trained attorneys to work with computer forensics and consult with the firm's clients on a wide variety of legal and IT issues, including statutory compliance, privacy, records retention and prelitigation positioning.

"The new practice is already generating revenue and is one of the firm's primary differentiators in the market," he says.

Kesner and his IT team are now focused on using technology to expand the firm's international client base. "We offer voice and video anywhere in the world at a really low cost by using voice over IP and video over IP and peer-to-peer networks," he explains. "We extend to Skype and have lots of videoconferences with iChat.

"If we have to move a lot of attorneys to areas where clients reside, we have 'away team' boxes that contain VoIP phones, video-over-IP technology and a full storage network, so we can put lawyers down anyplace in the world, and they pick up extensions with four-digit dialing," says Kesner. "Every day, we have lawyers in China, India and South America doing work with a laptop and a software-based telephone."

His willingness to test and deploy technology that is often shunned by larger organizations as too consumer-oriented for business use is precisely what is winning the firm new clients.

"Matt was far ahead of the curve with regard to developing the firm's capability to handle large-scale data mining and forensic investigations," says Lois Boyd, Fenwick & West's chief operating officer. "Instead of outsourcing this work at a significantly higher price to our clients, our capabilities have let us compete with firms much larger than ours as to quality, efficiency and price."

"A lot of the clients we work with are start-ups, so you have to find ways to do things creatively and quickly and at a very low expense, or else they can't afford it," says Kesner. "When there are great IT enhancements, it's IT's job to make them safe and productive" for the business to use.

With that done, what comes next is what Kesner and other IT leaders have been shooting for all along: true business transformation. ■

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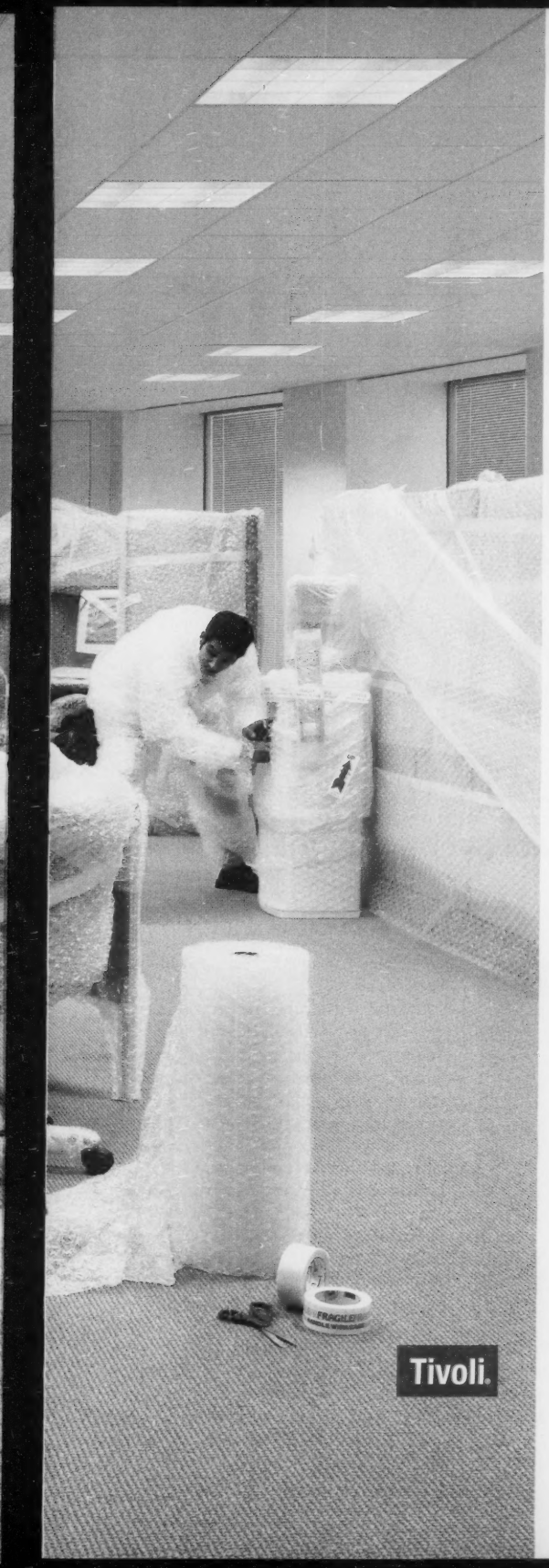

_INFRASTRUCTURE LOG

_DAY 82: There are so many risks out there. So many things that can happen to our business: natural disasters, spikes in traffic, mergers. How do we prepare? One in three companies don't recover from unplanned downtime.[1] Would we?

_Gil has wrapped everything in the office with bubble wrap. Everything. Just to be safe.

_DAY 83: I'm preparing with IBM Business Resilience Solutions. IBM Business Continuity Services can help us assess our risks and design a proactive plan to deal with them. IBM Tivoli gives us the visibility to diagnose and fix infrastructure problems. And the robust availability features of the IBM System p™ give us maximum uptime. The future feels so much safer now.

_No more bubble wrap. And I have to mail a package. Great.

Take the business continuity assessment at:
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Inside Their Project Portfolios

The visionary efforts of this year's Premier 100 honorees showcase the leadership skills that have put them at the top.

HOW DOES an IT leader choose the most innovative IT project to take on these days? For some, the decision comes down to one thing: speed.

Qualifying customers faster, getting proposals out more quickly, and making it fast and easy for the customer to do business with the organization are the keys to success in an environment where business interactions occur at an accelerating pace. Here's what you can learn from three Premier 100 honorees who led successful cutting-edge projects.

Hot Projects

These IT leaders broke down communication and departmental barriers to get cutting-edge projects off the ground.

By Robert L. Mitchell

GUIDO F. SACCHI

CIO, senior vice president of corporate strategies, CompuCredit Corp., Atlanta

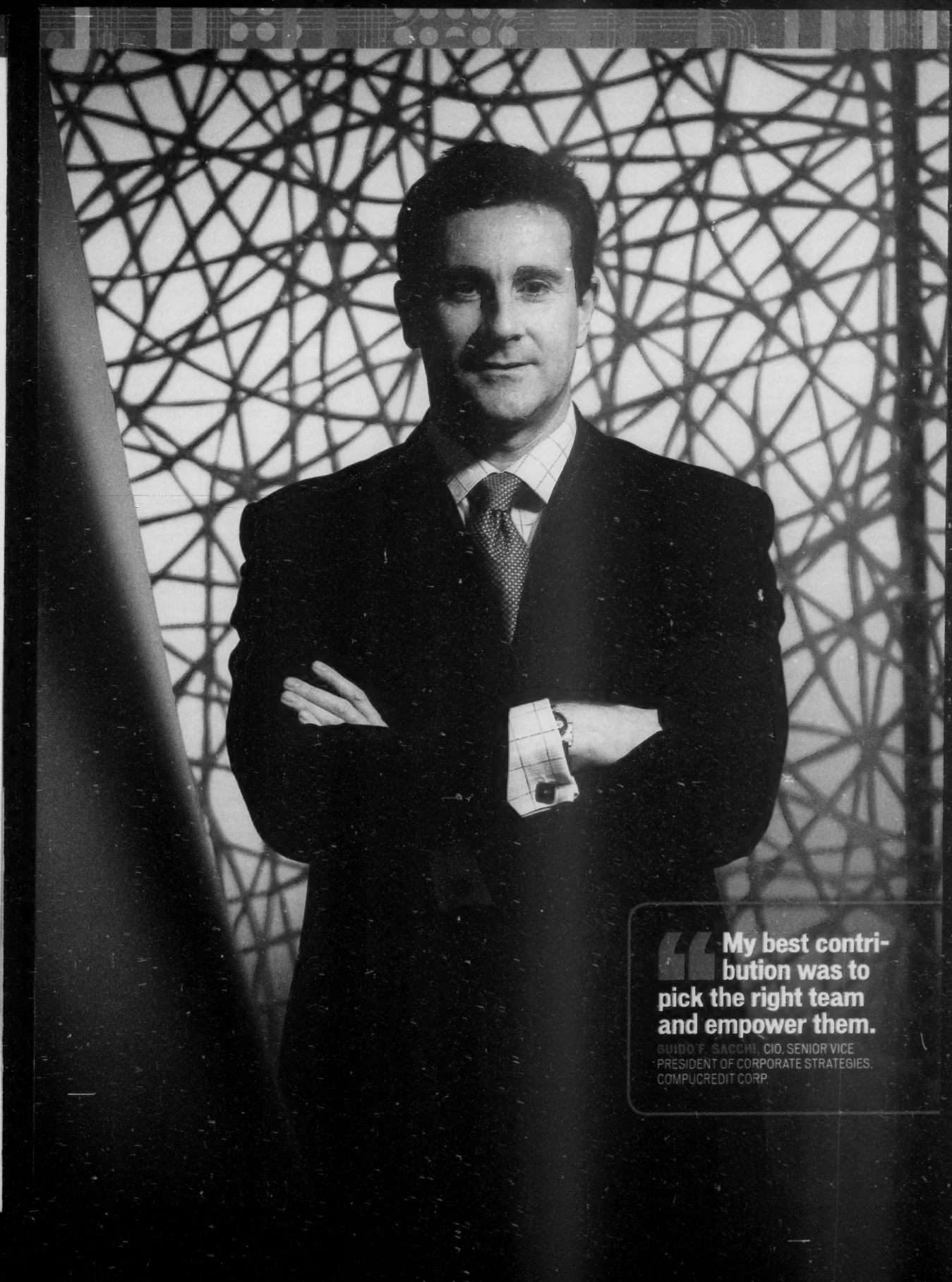
■ **Project at a glance: The data supply-chain project integrated data from internal and external sources into a single database and moved query and reporting activity to a separate data warehouse appliance that supports faster, more accurate loan decisions for the financial services company's customers.**

■ **Signature leadership move: Kept his team members on task by keeping their schedules clear.**

CompuCredit, which markets financial services to consumers with low credit scores, needed more timely access to information and better tools that its staff could use to make faster and more accurate lending decisions. The IT team met that need by consolidating credit card databases, streamlining and standardizing data ETL (extract, transform and load) processes, and moving query and reporting activity from the primary Oracle database to a Netezza Corp. data warehouse appliance that produces results an average of 150 times faster.

The project also met the CEO's mandate that IT drive down the unit cost per customer and leverage the business's economies of scale. "That was a direct alignment," says Sacchi, 43. He started the "nuts and bolts" supporting infrastructure upgrades over

PHOTO BY ISTAN KAADY


My best contribution was to pick the right team and empower them.
GUIDO F. SACCHI, CIO, SENIOR VICE PRESIDENT OF CORPORATE STRATEGIES, COMPUCREDIT CORP.

a two-year period that ended in 2006. After that, he says, "we did all of the BI layers that are visible to the user," completing them earlier this year.

Strategically, one of Sacchi's smartest moves was to separate the infrastructure-building phase in Year 1 from the business intelligence application phase in Year 2.

The infrastructure capital request went through corporate headquarters rather than individual business units. "I didn't have to cross-prioritize that against direct business initiatives," an approach that tends to starve infrastructure projects in favor of those with more immediate payback, Sacchi says. Once the foundation was laid, he budgeted with the business units to develop the BI applications, where direct benefits were evident.

To sell the job and keep interest high during the multiyear process, he demonstrated it to the president of CompuCredit's credit card business unit, Synovus Financial Corp. The president was so impressed that he immediately challenged his staff to begin using the tool.

Sacchi also brought on other potential users as part of the 30-member project team right from the start. "My best contribution was to pick the right team and empower them," he says.

Sacchi played a critical role in keeping staffers on task by keeping other projects off their plates and making sure their time wasn't overallocated. "Guido provided the air cover we needed to make the project successful," says Blake Sanders, executive director of enterprise development and data services.

The project sped up queries, gave workers access to more timely data, automated reporting tasks and empowered more staffers to perform their own queries, freeing up IT resources for other tasks. Creating a single, streamlined ETL process enabled more timely integration of data on daily transactions for CompuCredit's 5 million credit card customers, shrinking the load time from 36 hours to less than three.

Early on, it became clear that performance improvements would be dramatic. One user reported that processing time for a complex query had dropped from 43 hours to 12 minutes. As the capabilities became more evident, Sacchi needed to keep expectations in check and the project on track. "The danger in a project of this magnitude is controlling the scope," he says.

Once the system went online, it improved collections and lowered the cost of acquiring customers, saving the company $5 million — a 12-month payback.

"Innovation for business value is one of the most important things we do as CIOs. This project was the best in my career," Sacchi says. "It's a good example of how an innovative solution can be architected and delivered in a cooperative fashion."

BRADLEY D. FURUKAWA, VICE PRESIDENT, SECTOR CIO, NORTHROP GRUMMAN CORP.

> "It was my job to make sure the funds were there, make sure [the project] stayed visible . . . and let the engineers and scientists do their thing.

BRADLEY D. FURUKAWA
Vice president, sector CIO, Northrop Grumman Corp., Redondo Beach, Calif.
■ Project at a glance: The company created an 1,800-processor supercomputer cluster using Linux server blades and adapted some 400 applications for parallel processing. The project resulted in processing times for complex calculations that were up to 20 times faster and provided a common, cost-effective alternative to using individual workstations and smaller clusters associated with individual programs within the company's space technology unit.
■ Signature leadership move: Took an enterprise view of the project to maximize benefits across departments.

In a large-scale, multiyear project such as Northrop Grumman's effort to develop a supercomputing cluster, a successful outcome depends not just on getting the initial funding, but also on keeping the money flowing from year to year, says Furukawa, 50. While a team of IT professionals and scientists built out the cluster, he says, "it was my job to make sure the funds were there, make sure [the project] stayed visible in front of the vice president and president, remove any administrative barriers . . . and let the engineers and scientists do their thing."

Before the supercomputing cluster went online, "things" moved more slowly. Each program within the space technology business had its own workstations or small clusters. Furukawa had to sell the business on the idea of going from a culture where every project had dedicated resources to one where resources would be shared.

Having a common resource not only allowed work to be completed faster, but also helped programs with limited funding as well as new program proposals that required some upfront analysis to close new contracts. Furukawa was also careful not to tie the project to any specific program. "By keeping this sector-focused, all programs would benefit," Furukawa says.

"He did a good job in getting people to work together with an enterprise perspective rather than taking the narrower, project view," says Clayton Kau, vice president and general manager of Northrop Grumman's space and defense products division.

That paid off. Users building new program proposals, who previously lacked computing resources, used the shared cluster to add more simulations and analysis to proposals. That enabled the space technology unit to gain more business, meeting the CIO's challenge to "raise the bar on performance."

The shared cluster "increased our probability of a win in all of our program pursuits," and it provides analysis that keeps existing contracts funded when they come up for review, Furukawa says. "Continuing to show over many years what the programs will do keeps the programs sold," he says.

In launching the project, Furukawa also helped to set up a governance board to determine which people and programs would get to use the resources and how those resources would be allocated. "No matter how much computing power you have, you can always max it out. They set the priori-

Continued on page 38

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Continued from page 36

ties," he says. Based on those decisions, the team can set controls to allocate the resources and monitor their use.

Visibility was critical to the project's success. As the cluster grew to 979 processors last year, the governance team got scientists up and running on it as quickly as possible. "The positive feedback made it all the way up to the sector president's level," Furukawa says.

In fact, the program was so well received that Furukawa not only kept his funding for the following year, but was also given some of the funding earlier so that the project could expand faster.

"Keeping the project on schedule and within budget really added to the success and credibility," says Kau.

"The people who are down in the trenches are the folks you have to stay close to. You have to listen to them.

DAVID G. ZANCA, SENIOR VICE PRESIDENT OF E-COMMERCE TECHNOLOGY, FEDEX CORPORATE SERVICES INC.

Furukawa says he's trying to keep interest high as the project moves from 1,800 processors to its ultimate goal of 3,000 CPUs, and he has opened up access to the rest of the company over Northrop's internal network. "I don't want to see the utilization dropping off at 2,000 CPUs," he says. "That would stall further investment."

DAVID G. ZANCA
Senior vice president of e-commerce technology, FedEx Corporate Services Inc., Collierville, Tenn.

■ Project at a glance: Zanca manages several hundred software developers in an ongoing effort to embed FedEx services into mobile devices and the applications its customers use every day. The project's goal is also to make those services available globally and across all FedEx Corp. business units, from FedEx Ground to Kinko's. Under Zanca's direction, the group has launched the MyFedEx Web site, enhanced mobile services, developed plug-ins for applications and offered a suite of Web services that business customers can use.

■ Signature leadership move: Built strong lines of communication among project stakeholders at every level.

On a warm October day, Zanca, CIO Robert Carter and the rest of the IT team are flipping burgers at an IT-sponsored cookout for 2,500 employees at FedEx Corporate Services' Memphis facility. "It gives me an opportunity to create a connection with these folks," Zanca says, and that's part of his strategy for success.

There are three keys to a successful project, he says. In FedEx's distributed, 7,000-employee IT operation, perseverance pays off. "If you really believe in a game-changing shift, you're going to have to persevere and convince various folks that a new technology, a new approach, will work," he says. For Zanca, 49, that vision — and the strategy for execution — is the culmination of many years of work.

Three years ago, FedEx Corporate Services was tasked with breaking down FedEx's monolithic capabilities into Web services, building on the company's core FedEx.com and Ship Manager applications, and advancing the technology toward next-generation services that would give customers instant access to FedEx services and tracking data.

To that end, Zanca's group last summer introduced the Developer Resource Center. The Web-based offering makes key services, such as tracking and dispatch, available through standards such as WSDL and provides code snippets that help businesses take advantage of those services.

Zanca's group also recently developed and launched MyFedEx.com, which lets users track both outbound and inbound shipments. And it enhanced its mobile device support, enabling customers to use smart phones to generate shipping labels, for example.

In addition, it introduced a series of plug-ins, including ones for Adobe Acrobat and Microsoft Outlook, that let users upload, prepare, price and submit print jobs to Kinko's shops.

The plug-ins "changed our strategy from FedEx.com being a destination to FedEx being an embedded part of [a customer's] environment," Zanca says.

To get these projects completed, Zanca built consensus through what he calls the "Max Plan," which involves regular meetings with top executives.

His second key to success lies in keeping close to his own staff as well as internal constituents. "The people who are down in the trenches are the folks you have to stay close to. You have to listen to them," Zanca says, to set realistic goals for success — and to move those goals if need be.

"David is into the details," says Bob Thomas, managing director of technology services. His group helps customers use FedEx's Web services offerings.

Zanca helped launch early Web services efforts at FedEx Corporate Services before moving to the FedEx Freight division for a couple of years. He returned to FedEx Corporate Services last January.

Shortly after Zanca came back, Thomas had a meeting with the staff. "I told them, 'Don't be surprised if you get a call from David with a specific question about one of our products, because he is into the details and he will go straight to the source.' And that's a good thing," he says.

The third leg of Zanca's strategy is to maintain transparency with internal business partners so that there are no surprises. "There are going to be bumps in the road," he says. "You have to keep executives informed and manage expectations."

Zanca's team also built tools that measure the success of each initiative. The company can see how much business is coming through new channels, such as mobile, Web services or plug-ins. "We have metrics as one of our design criteria so we can see where the business is coming from," as well as whether the business is "channel shift" or truly new business, Zanca says. "It's definitely [bringing in] new business." ■

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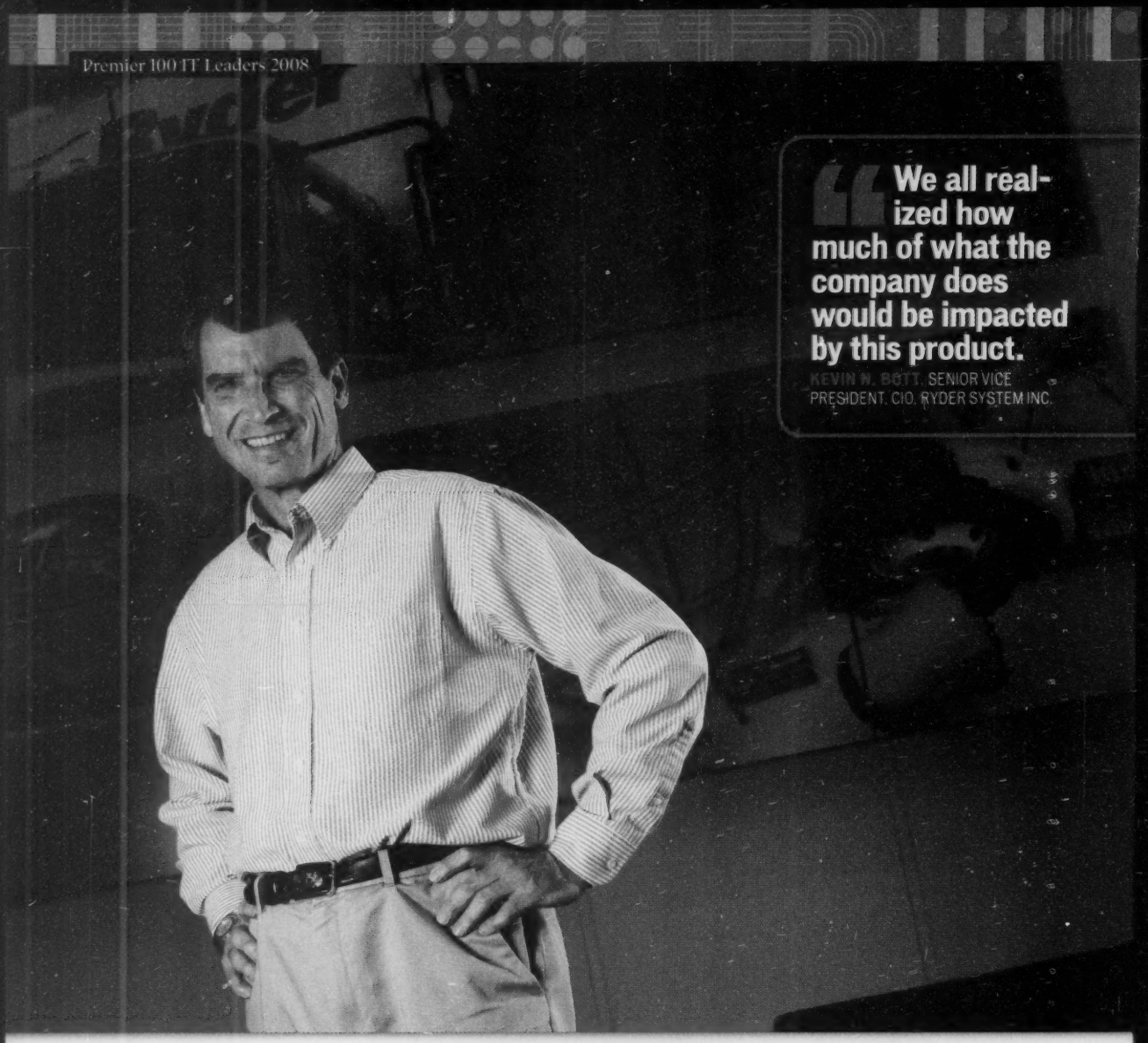

> **"We all realized how much of what the company does would be impacted by this product."**
>
> KEVIN N. BOTT, SENIOR VICE PRESIDENT, CIO, RYDER SYSTEM INC.

Lean Projects

Designed to shave expenses, these projects turned into big ROI wins under these assertive IT leaders.

By Jennifer McAdams

PHOTO BY PRESTON MACK

OFTEN, A STANDOUT IT leader is one who champions a project and guides a team to do remarkable things with scant resources. These *Computerworld* Premier 100 honorees had the courage to ask tough questions and used their consensus-building skills, flexibility and detailed analysis to reap huge gains internally.

KEVIN N. BOTT
Senior vice president, CIO, Ryder System Inc., Miami

■ Project at a glance: When this major trucking company decided to deploy wireless devices to improve fleet operations and reduce costs, internal interest in the project mushroomed. One IT executive vowed to keep the project team on task. Now, the new devices are hitched to more than 4,000 Ryder vehicles, yielding substantial savings.

■ Signature leadership move: Steered a project back on track after its scope began to bloat as it gained greater visibility within the company.

Envisioned as a classic lean IT project, RydeSmart started off in June 2006 as a relatively modest endeavor. Bott, 52, was at the wheel of a tightknit project team made up of handpicked individuals who represented the interests

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of the company's many business units. Bott held mandatory weekly review meetings and drove his team to hold down costs and target specific fleet efficiencies.

But things began to change as RydeSmart's visibility grew. The team swelled, and the project's scope began to bloat. "We all realized how much of what the company does would be impacted by this product," recalls Bott. RydeSmart devices are wireless hardware/software units that make use of GPS and other technologies to help track the location of Ryder vehicles. The goal was to improve areas such as fuel efficiency.

As interest in RydeSmart grew, so did the project's technical snafus. For instance, the growing RydeSmart team wanted a say in how the units would be deployed, even after the units had been shipped out for installation.

Other problems emerged, including the fact that Ryder's diverse fleet comprised various vehicle makes, models and years that didn't fit conveniently into guidelines devised for electronic communications module transactions.

Bott realized he would have to move swiftly and decisively to keep RydeSmart on track. "I worked with the core team to establish processes for inventory control. I followed up with the team on weekly resolution calls with our primary vendor partners to resolve installation issues," he says.

In the end, Bott steered RydeSmart back in the right direction and has the return on investment to prove it. Upfront hardware investments were offset immediately by efficiencies. Plus, Ryder's market share increased; customers liked the idea that RydeSmart makes it unnecessary for drivers to deal with bothersome tasks such as reading odometers and reporting fuel usage.

"RydeSmart improved our business operations and helped differentiate us in the marketplace," notes Robert Sanchez, executive vice president of operations at Ryder Fleet Management Solutions. "Kevin was very involved in terms of corporate strategy and IT integration. He helped internal stakeholders and Ryder customers understand the value of the solution."

In the end, the hard work paid off. "We have achieved savings in trip records processing, breakdown repair costs, idle-time fuel reductions, out-of-route mileage reductions, improved asset utilization and more-efficient driver hours," says Bott.

Indeed, Sanchez and others credit Bott and his team for the turnaround — mostly because Bott refused to let the effort become too corporate-focused and instead chose to concentrate on tangible areas of savings.

WENDY M. CEBULA, CHIEF OPERATING OFFICER, VISTAPRINT LTD.

"I've learned that you can't have any preconceived notions when it comes to technology or be married to a specific solution.

WENDY M. CEBULA
Chief operating officer, VistaPrint Ltd., Lexington, Mass.

■ Project at a glance: In the wake of a corporate office move, the online supplier of graphic design services and printed products pondered the best site for its data center assets. By forgoing conventional plans and the most convenient decisions, the company will save more than $450,000 over the next three years.

■ Signature leadership move: Drew on analytics expertise to question an already-accepted strategy.

Without a doubt, out-of-pocket costs for an office to move either down the street or across the country can be very steep. Cebula, 36, didn't argue this point when she encouraged company officials in the midst of planning a corporate move in January 2006 to rethink VistaPrint's data center strategy. It was a big request, since chaos was about to ensue as boxes, desks and chairs were loaded into moving vans.

Despite the timing, Cebula had her staff dig out hard figures and long-term projections on different data center scenarios so she could offer top executives tangible options and potential savings.

"Given my background — which includes analytics — I've learned that you can't have any preconceived notions when it comes to technology or be married to a specific solution. Therefore, I asked my team to crunch the numbers and find the best alternatives," she says.

Ultimately, Cebula persuaded VistaPrint decision-makers to shirk the conventional route of simply moving data center operations along with the company's furniture and other assets to a new location in Lexington, Mass. Instead, she made a solid case for building a new data center in Windsor, Ontario, and increasing the scope of operations at a facility in Bermuda.

Often, finding the best options calls for intensive brainstorming, and Cebula and her staff had to think through everything. For instance, Canada's hydroelectric power infrastructure promised real savings. By Cebula's estimate, the company would save $130,000 in the first year because of a 12-cent difference in the cost of kilowatts per hour.

Canada's lower utility charges were only part of VistaPrint's plans to cut energy costs. The company also leveraged its data center move as a catalyst for wholesale migration to an architecture based on virtualized servers. "This will reduce energy usage for our server farm by 75% and is the biggest piece of the cost savings. As a result, we expect to save $450,000 over three years, which is more than the cost of the hardware refresh," says Cebula. That $450,000 is in addition to the $130,000 savings on electricity.

In fact, Cebula's strengths lie in her ability to see beyond the immediate, says Aaron Branham, the company's vice president of technical operations. "As with most projects at VistaPrint, initiatives tend to start with a problem or a trigger event — in this case, moving our Lexington office," he notes. "The standard approach would be for all of the gear — servers, networks, etc. — to be simply moved to the new building."

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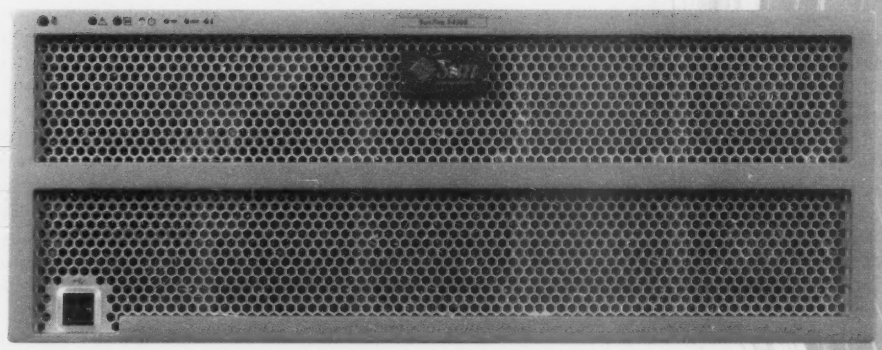

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When the time came, however, Cebula didn't flinch and instead asked, Why settle for the standard approach? She also refused to stop at a single answer, choosing to pursue many scenarios. The result: a decision that has yielded VistaPrint hefty savings.

ASIF AHMAD

Vice president of diagnostic services, CIO, associate dean of academic computing, Duke University Health System and Medical Center, Durham, N.C.

■ Project at a glance: While respecting the sacred argument that a new computerized physician order entry (CPOE) system could save lives, this hospital dared to ask for tangible metrics and hard facts on potential savings. The immediate result was $2 million in efficiencies and the promise of more.

■ Signature leadership move: Asked tough – even taboo – questions to remake a system.

If there's one thing that Ahmad, 40, learned upon entering the health care IT field, it's this: Technology staffers are reluctant to challenge medical officials on expenditures for fear of running afoul of deep-seated taboos. In other words, no one wants to be viewed as skeptical of a system that could save lives.

Yet, Ahmad also noticed that there isn't always a correlation between money spent and lives saved. In fact, without hard data, such a correlation is virtually impossible to make, he argues. "In health care IT, I really feel like most CIOs don't ask for ROI or question why an institution is adopting a particular system. Instead, they are like a herd of cows that start to move in one direction just because one or two of them moved there first," he says.

Albeit delicately, Ahmad was determined to break that trend when it came time to make vital decisions around the design and installation of a CPOE, a system that would address the age-old problem of how to deal with orders and prescriptions that hinge on abysmal physician handwriting. With the CPOE, doctors input orders directly into the system, so treatment is expedited and errors are reduced.

"We looked for reasons why [the] CPOE should be implemented at Duke. We demanded tangible metrics — not always dollar metrics but quality-of-care metrics that, in the end, would lead to savings," he says. "We stayed away from subjectivity and rationalizations based on notions such as, 'It just feels right.' "

By asking the tougher questions, Ahmad helped Duke emerge as one of the 1.5% of the nation's hospitals that have fully adopted the CPOE. Furthermore, Ahmad and his team were able to complete the project with almost no delays. "We delivered the project in record time and enjoyed a huge rate of acceptance among hospital staff," he says.

Ahmad offers this advice to other CIOs: "Get out of your comfort zone and become a process leader for your organization." Especially in a hospital setting, asking tough questions can quickly become uncomfortable. Ask them anyway, Ahmad urges.

CHARLES M. SMITH

Director of technology business operations, TD Ameritrade Inc., Columbia, Md.

■ Project at a glance: When a major acquisition turned two financial powerhouses into one gargantuan firm, the IT staff refused to simply go through the motions. Instead of mindlessly extending key contracts, technology officials looked for savings and negotiated mightily.

■ Signature leadership move: Saw the big picture, which allowed him to find massive savings in small places.

It was Smith's first crack at managing the IT implications of a major merger. However, Smith, 43, was immediately confident that the status quo was not the approach to take in smoothing technical operations after Ameritrade's 2005 acquisition of TD Waterhouse (TDW).

"Initially, we considered using the stand-alone process used for past acquisitions, but due to the number of contracts and complexity of terms and timing, I decided to fully integrate the TDW contracts," says Smith.

His attention jumped to contracts with looming renewal dates, and especially those with automatic renewal terms. With the starting point identified, Smith quickly maximized TD Ameritrade's leverage at the bargaining table.

"By taking opportunities to renegotiate contracts when we had the most flexibility, we put ourselves in a position to negotiate on our own terms," he says. "If we had simply focused on contract end or renewal dates, these opportunities would have passed."

Smith points to the telecommunications-related savings that he helped the blended company realize as a highlight of the project.

"My first target was telecom, and I renegotiated the primary contract for voice and data on the legacy side to cut spending by over 60% with no reduction in services," he says.

Smith's advice to other IT executives in the middle of a major merger: Don't settle for, assume or overlook anything. Also, when making big decisions, stay close to other business units. "The negotiation of the terms and timing for contract termination was largely driven by the needs of our business counterparts," he says. ■

McAdams *is a freelance writer in Vienna, Va. Contact her at JMTechWriter@aol.com.*

"By taking opportunities to renegotiate contracts when we had the most flexibility, we put ourselves in a position to negotiate on our own terms.

CHARLES M. SMITH, DIRECTOR OF TECHNOLOGY BUSINESS OPERATIONS, TD AMERITRADE INC.

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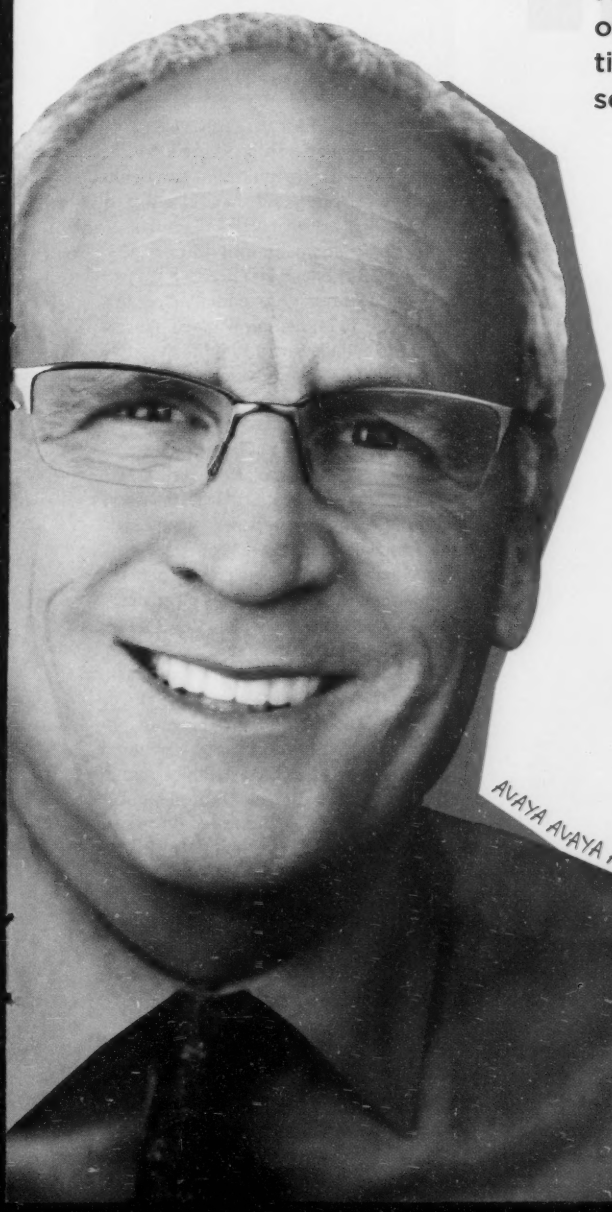

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Power Projects

High-impact systems upgrades required both top-notch leadership skills and sharp execution for success.

By Mary K. Pratt

THERE'S NO CHECKLIST for leadership. There's no single formula that can be duplicated time and again to achieve all of a business's objectives. However, individuals can learn the skills and strategies it takes to become a business leader who can successfully juggle many tasks. Here's how three Premier 100 IT Leaders navigated three very high-impact projects.

MICHAEL S. ISRAEL
Senior vice president of information services, Six Flags Inc., New York

■ **Project at a glance: Six Flags, the world's largest regional theme-park company, set about updating, centralizing, streamlining and standardizing the aging, distributed IT infrastructure used throughout its offices and 21 theme parks.**

■ **Signature leadership move: First envisioned, then managed, a detailed and multiphase project plan.**

Israel, 40, started at Six Flags in April 2006 with his eyes set on change. President and CEO Mark Shapiro and other senior managers wanted technol-

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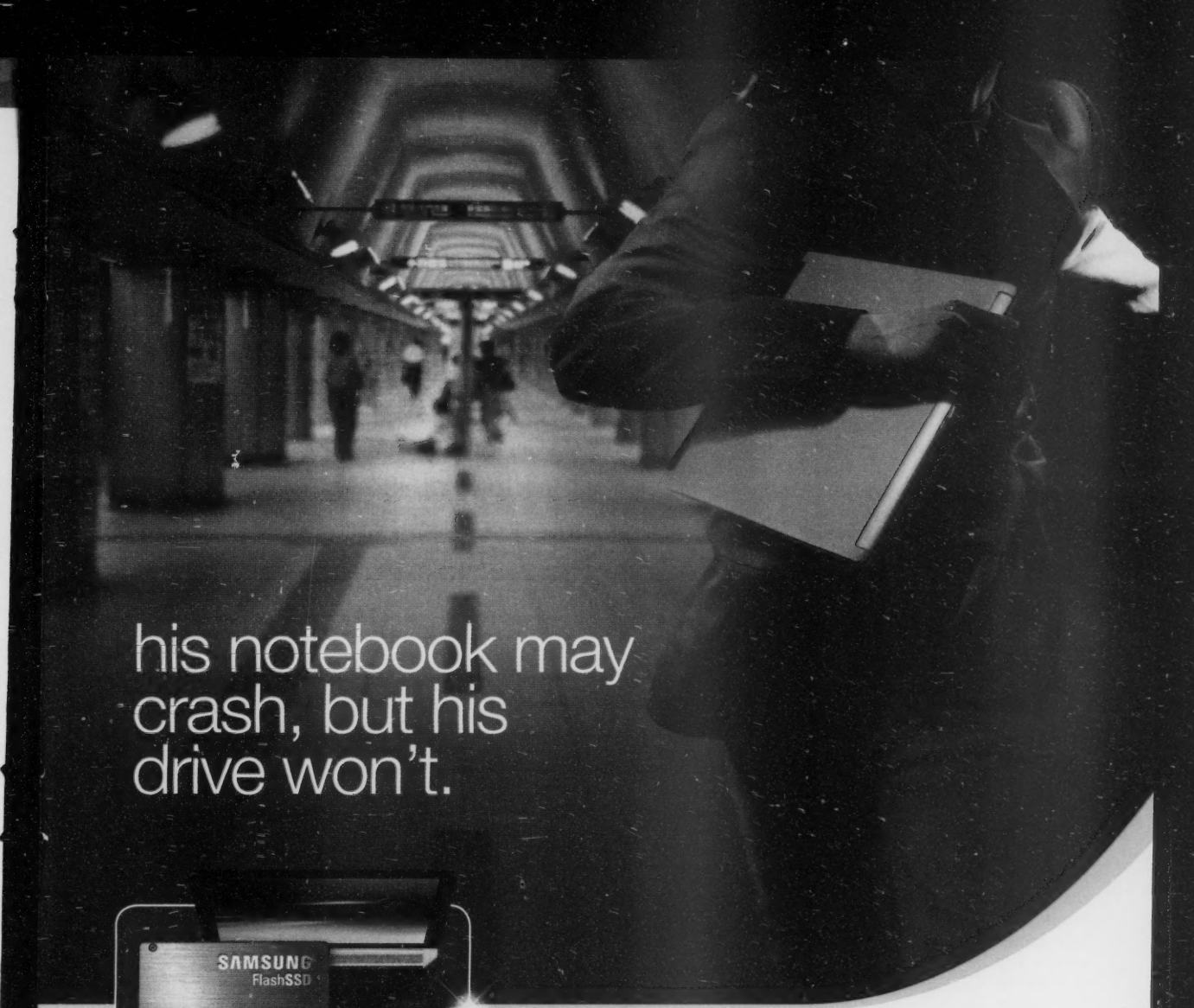
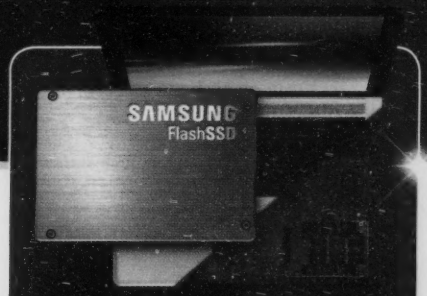
"After determining what we had, I basically architected where we had to be.

MICHAEL S. ISRAEL, SENIOR VICE PRESIDENT OF INFORMATION SERVICES, SIX FLAGS INC.



his notebook may crash, but his drive won't.



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[1]Mean Time between Failure
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Continued from page 46

ogy that would support immediate and long-range business objectives, not just keep the lights on.

But Israel says that as he took stock, he realized that he had neither the infrastructure nor the staff to reach that goal. He discovered that each park was using different technologies and there was no standardization of the company's IT infrastructure.

"After determining what we had, I basically architected where we had to be," he says.

Israel walked through every park to see how guests came into the facilities, how they bought pizza, how they waited in line for rides and so on, to get the information he needed to design a system that would meet business needs and goals. He also hired consultants to help assess the existing infrastructure and design a new one.

His plans called for centralizing the company's IT infrastructure at Six Flags' main data center in Dallas and standardizing certain technologies and procedures across all parks.

Israel attributes the project's success to several fundamental steps: standardizing key technologies such as servers, storage and software; documenting details of the new system so that there's a clear record of every asset and how it integrates with other assets; and re-educating the IT staffers to ensure that they can support the new systems and that they understand the new policies and procedures.

"The project wouldn't be a success if no one knows how to manage it, how to use it, how to support it, and what and where the equipment is," Israel says.

That's a tall order, and Israel says he also had to ensure that the project didn't get derailed by local interference or a lack of support from senior managers. He credits good communication between his two project management teams and the various groups involved in or affected by the upgrades.

"It was constant communication and a lot of airplane rides," he notes. "It was project meetings, conference calls and senior staff updates."

Angie Vieira Barocas, Six Flags' senior vice president of entertainment and marketing, says she appreciates that approach. Vieira says she admires Israel's ability to stay focused and deliver a product that helps her and others do their jobs better.

"He has done a yeoman's job. We weren't in the 21st century in terms of technology, and he has managed through a lot of challenges," she says.

Israel notes that involving stakeholders from Day One helped get the cooperation necessary to make this project successful. He says he earned that cooperation by explaining the project plans, the reasons behind them and the anticipated benefits.

With 10 facilities done and work at another six planned for 2008 and 2009, Israel says it's clear that the new, consolidated infrastructure is delivering important benefits, including financial savings and improved availability.

The infrastructure is also allowing other business units to move forward by providing them with the tools they need for new initiatives, a point that aligns with the CEO's goals, Israel says.

SHENG GUO, CTO, NEW YORK STATE UNIFIED COURT SYSTEM

"I don't [look at] this like just a technical project. The whole point here is to understand the business requirements.

SHENG GUO
Chief technology officer, New York State Unified Court System

■ **Project at a glance: The goal was to install multiple Wi-Fi access points in the state's 250 courthouses. Guo works with 400 IT people spread out over 62 counties for a system that processes approximately 400,000 jurors through its facilities every year.**

■ **Signature leadership move: Sold upper management on a compelling business case that has exceeded expectations.**

The New York State Unified Court System had a pilot Wi-Fi project in 2003 in which an outside company provided connectivity for a fee within select buildings. Guo, 43, says he saw the need to expand Wi-Fi — but not that particular pilot program.

Guo says he believes the state should provide Wi-Fi in courthouses for free as a public service. If the state continued to charge for Wi-Fi, he says, the initiative to expand would have failed.

"The courthouse is our building, and we already have a wire network there," says Guo. "To expand to Wi-Fi is easy, so I made my case to my bosses."

His proposal, made in 2004, set in motion a multiyear project that's putting Wi-Fi access points into the state's 250 courthouses.

Plans called for installing some 250 access points every year, starting with the jury assembly rooms in each building. Guo says it was a top priority to provide access to the 400,000 jurors who come through annually to perform their civic duty. "They go through a lot of waiting, so Wi-Fi is a perfect thing for them," Guo explains.

Project plans have Wi-Fi going into attorney lounges, the public law libraries and high-traffic public areas, too.

The benefits are significant, Guo says. As an example, he points out that attorneys from the Legal Aid Society, who spend substantial hours in the courthouses, are now using laptops to check e-mail, perform legal research and look up case information.

As CTO, Guo is responsible for the architecture as well as for designing, planning, implementing and supporting the Wi-Fi network.

He says his most significant contribution was understanding the business case for this project. "I don't [look at] this like just a technical project. The whole point here is to understand the business requirements," he says.

Aligning the project with business needs helped him persuade upper management to invest in the plan for the long term, Guo says. It also helped that he was able to show that jurors and other constituents viewed Wi-Fi as a positive.

"Each day when I thank the jurors and ask for their comments, I hear that the Wi-Fi is great," says Nancy T. Sunshine, commissioner of jurors for Kings County.

Continued on page 50

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Guo involved multiple stakeholders as soon as the project got a green light. Their input helped him determine which areas should get Wi-Fi access points first, he explains.

Guo says the Wi-Fi initiative aligned with the court system's goal of providing equal service throughout the organization, which contributed to its success. Involving local workers, such as building and IT managers, to get their buy-in and their help in navigating the court buildings — some of which are historic — was another factor in the project's success.

Moreover, Guo says he also understood how the Wi-Fi initiative could support multiple applications and future goals. For instance, court officers in some buildings couldn't use radio communications because of frequency interference with the systems of public-safety agencies. So Guo blanketed those buildings with Wi-Fi and gave voice-over-wireless-LAN phones to the court officers.

Guo's team had installed more than 700 access points by the end of September. Guo plans to continue adding access points in the years ahead to expand service so that all constituents who use the court buildings can use Wi-Fi. Approximately 1,000 people use the Wi-Fi system daily, and Guo expects that number to double in the coming months.

JEFFREY R. VOSE
Production systems director, Chicago Tribune Interactive

■ Project at a glance: The project entailed replacing an existing ad-serving system used to take orders as well as to schedule, queue and launch ads – with only about six months to finish the task.

■ Signature leadership move: Assembled stakeholders and contributors to nail the specifics.

When Vose, 41, took over Chicago Tribune Interactive's ad operations team in 2005, he got a firsthand look at the limitations of the ad-serving system used by the sales and ad operations departments. He proposed upgrading the system, starting the project in early 2006 and delivering the new system six months later.

Vose says he developed "an extremely detailed project plan to make sure nothing was left to interpretation and that no critical tasks were overlooked."

To do that, he picked team members who were subject-matter experts, and he involved stakeholders from the start so that all issues could be addressed early in the process.

The goal was to have a system with the functions and features needed for the sales and ad operations departments to work more efficiently while delivering more to their clients — the advertisers themselves, Vose says. The system — enterprise-class Dart for Publishers, which is hosted software from DoubleClick Inc. — does that by supporting improved accuracy in delivery and expanded reporting capabilities, for example.

There's no question that the project was a large undertaking, and Vose says that one of the biggest concerns was messing up orders already in the system during the migration to the new one.

He says careful planning prevented that. "It was understanding how the systems interfaced and making sure the correct information was being passed across," he says, adding that his project team modified the existing order entry system to accommodate the migration to the new one.

Vose says one of the top three factors for the project's success was making sure orders were entered accurately; he hired an accounting agency to provide temporary workers to do data entry, rather than asking salespeople to re-enter needed information on top of their existing duties. Vose's IT team also wrote a program to compare raw data to the new entries nightly to ensure accuracy.

Another factor in the project's success was getting senior management support and fostering buy-in among team members. Vose says he gave people a voice in the project, which "provided them with a better sense of ownership."

The decision to make additional technology improvements that empowered the sales team, rather than just converting to a new ad-serving system, also helped ensure success, Vose adds. That created efficiencies in the process that "save a ton of time in the overall process."

Vose also credits his connection to his counterparts in other business units. Working with the salespeople from the start to understand their needs helped him win project approval from senior management and made it easier to select the right vendor, he says.

Moreover, Vose's connection to other departments didn't wane as the project progressed. He sent out weekly e-mail updates to about 75 stakeholders, a process that prompted open dialogue that generated ideas on how to deliver the strongest product possible.

The end result, Vose says, is an ad-serving system that supports senior management's goals for aggressive revenue growth and new advertising opportunities.

"It's allowed us to manage our campaigns more effectively than in the past," says Joe Farrell, director of advertising sales for Chicago Tribune Interactive. ■

"It was understanding how the systems interfaced and making sure the correct information was being passed across.

JEFFREY R. VOSE, PRODUCTION SYSTEMS DIRECTOR, CHICAGO TRIBUNE INTERACTIVE

Pratt *is a* Computerworld *contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.*

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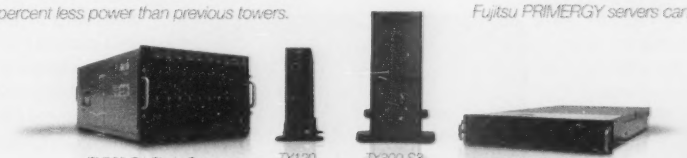

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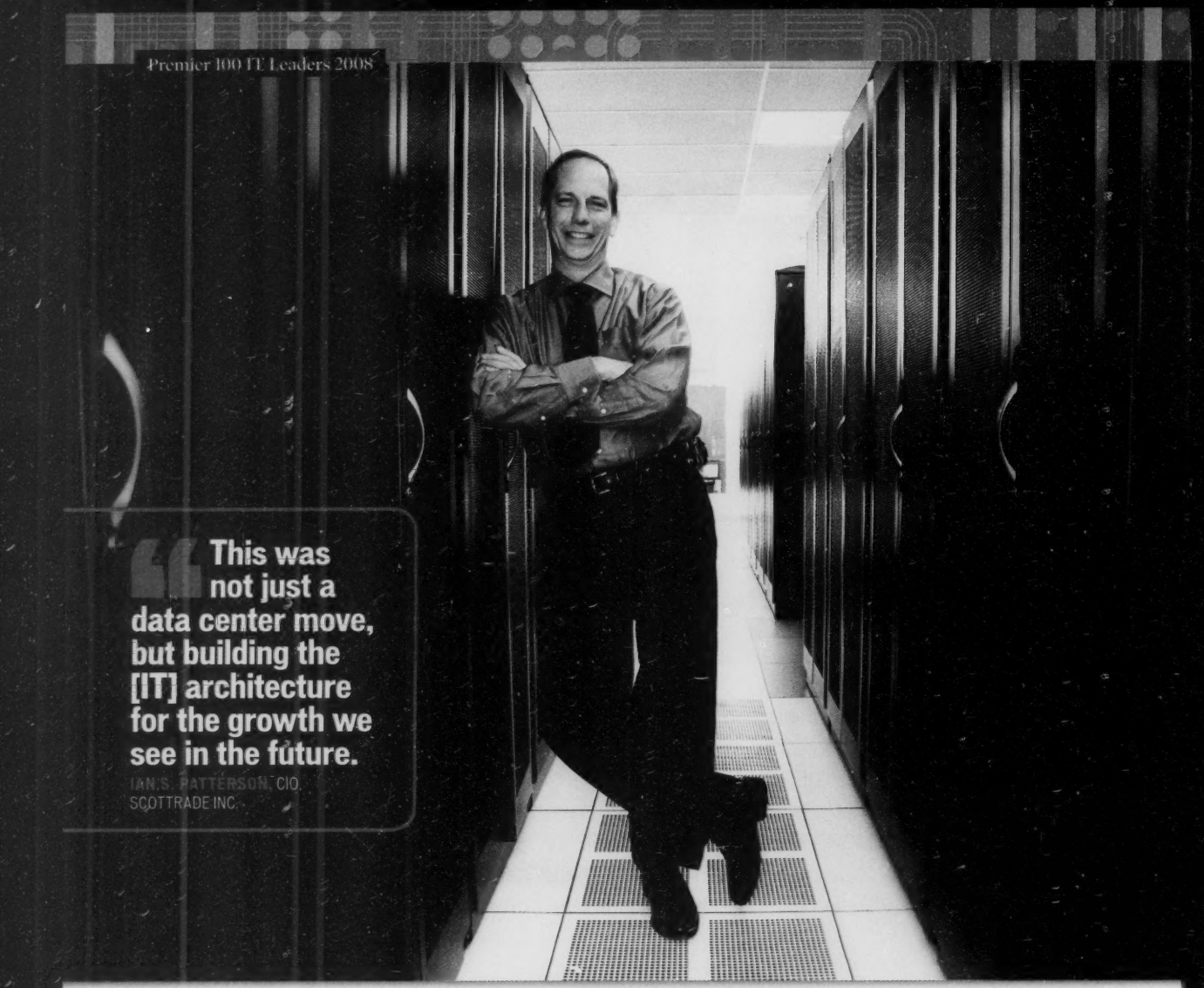

> **"This was not just a data center move, but building the [IT] architecture for the growth we see in the future."**
>
> IAN S. PATTERSON, CIO, SCOTTRADE INC.

Jumbo Projects

The bigger the project, the bigger the risk. These IT leaders kept up with multiple stakeholders and deadlines.

By Thomas Hoffman

WHEN IT COMES to leaders, no two are alike. But while there are distinct leadership styles, there are also common traits among those who influence.

An ability to listen well, create or capture a vision, and be creative and open-minded while staying on task are just a few. These three Premier 100 honorees oversaw long-term, multistage projects that put their core leadership qualities to the test.

IAN S. PATTERSON
CIO, Scottrade Inc., St. Louis

■ Project at a glance: The online investment company built a 34,000-square-foot data center to help support annual double-digit increases in daily trading volume along with an exponential increase in the amount of so-called market traffic that it receives from financial data providers such as Bloomberg LP and Reuters Group PLC.

■ Signature leadership move: Kept up team morale by regularly communicating his support and appreciation.

Before Scottrade broke ground on a $25 million data center last year, the company hired a project manager to oversee its biggest project ever and make sure all the deadlines were met.

With the necessary personnel in place, Patterson, 46, focused on other aspects of the project. For example, he made sure that vendors such as Cisco

Continued on page 54

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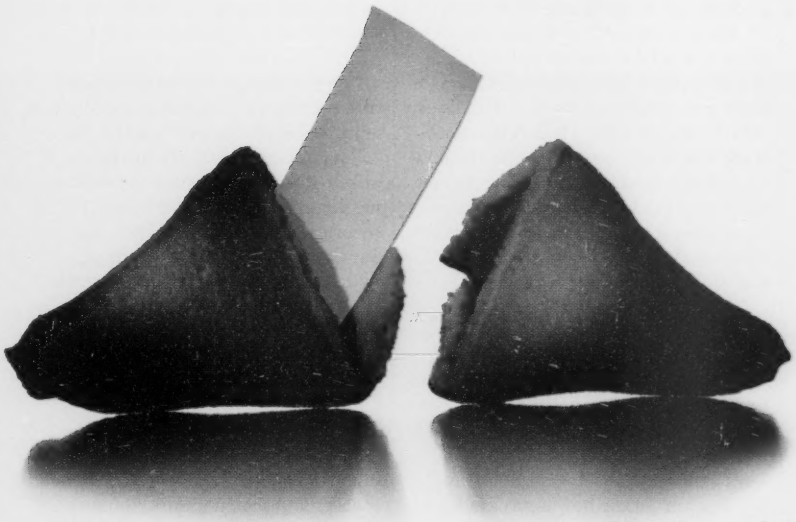

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Continued from page 52

Systems Inc. understood the business context of the company's escalating network capacity requirements before designing a new network infrastructure.

Online brokerages such as Scottrade often handle 10% to 20% of their daily trading volume right after the opening bell. "When the market opens, we can just get slammed," says Patterson.

The pace of trading can remain frenetic throughout the course of a day when the market is experiencing the kinds of gyrations it has undergone recently. Scottrade has seen a 27% year-over-year increase in daily stock trades, from about 170,000 to 190,000 daily trades in 2006 to between 230,000 and 260,000 trades per day this year.

Meanwhile, market data provided by firms such as Bloomberg and Reuters has surged from a high of about 4,200 stock quotes per second on a typical day in the summer of 2006 to 31,000 quotes per second in July 2007, says Patterson.

"This was not just a data center move, but building the [IT] architecture for the growth we see in the future," he explains.

So three months before Scottrade began designing the data center, Patterson brought in a group of Cisco engineers and allowed them to dig into its existing network "to understand our peaks and valleys" of data traffic, he says.

Once the new network was built, Patterson brought in other firms to stress-test it for six weeks before lighting it up. "What we did was test, test and test," says Patterson.

For an online brokerage like Scottrade, which also boasts 311 branch offices, gathering data and managing and executing trades is a business that requires a state-of-the-art data center where downtime isn't an option.

In light of that, Patterson believes his greatest contribution to the 12-month project was communicating each person's role and reminding them how much their contributions were appreciated.

"IT is a Rodney Dangerfield-type job," says Patterson, who left a consulting role at Deloitte & Touche LLP to become Scottrade's CIO in July 2005. "It was really about letting everyone feel and understand that I was there" to support them, he adds.

To ensure that the transition between data centers didn't affect customers, Patterson and his team worked closely with AT&T Inc. and Verizon Communications Inc. to set up 10 Gigabit Ethernet pipes spanning the eight miles between the two data centers.

That kind of contingency planning paid off. Scottrade works with about 20 "market makers" — broker-dealer firms that hold shares of a given security in order to facilitate trades. Each of them owns and runs its own data lines into the online brokerage. When Scottrade was ready to go live with the new data center in May, some of the market makers didn't have their communications lines ready. "So we used those redundant lines to transfer their traffic," explains Patterson.

The new data center is "essential" to Scottrade's capacity to offer new products and services, says President and CEO Rodger Riney, who sponsored the project.

Patterson's ability "to motivate and lead our IT staff," he says, "has been key to the successful completion and integration" of the new data center.

DWIGHT D. SMITH, SENIOR VICE PRESIDENT OF INFORMATION RESOURCES, MARRIOTT VACATION CLUB INTERNATIONAL

"We demonstrated to people that this wouldn't be the 'be-all, end-all' system. We'd learn from the market and then add functionality [later].

DWIGHT D. SMITH
Senior vice president of information resources, Marriott Vacation Club International, Orlando

■ Project at a glance: Marriott Vacation Club International's IT organization moved quickly to identify, select and implement a points-based reservation system to help support a business decision to rapidly expand MVCI's presence in the Asia-Pacific time-share market.

■ Signature leadership move: Played the diplomat to ensure that all voices were heard in the priority-setting process.

In late 2005, when Smith, 46, became involved in a fast-track project to support MVCI's expansion plans in the Asia-Pacific region, his biggest responsibilities were centered around balancing the priorities of key stakeholders.

"The challenge was to make sure that everyone's criteria for success was going to be addressed," says Smith.

That meant harmonizing the needs of key stakeholders, such as the business executive responsible for MVCI's resort management activities. For Smith, it also meant determining which features were essential for the reservation system for the short term while limiting the level of customization done so that the system could be implemented fast.

"We had to get to market quickly," says Smith. "We demonstrated to people that this wouldn't be the 'be-all, end-all' system. We'd learn from the market and then add functionality" later, he says.

To identify and balance varying priorities from different constituents, Smith met early and often with a mix of business unit and business process leaders.

"The biggest thing that I needed to do in the beginning was make sure what 'success' was for [the Asia-Pacific business team and the business process owners] and create a bridge between what I was seeing going on in the market and what was going on internally at MVCI," says Smith, a 20-year Marriott veteran. That process included promoting the needs of MVCI's IT organization, he adds.

It also required diplomacy to ensure that those priorities were, in fact, balanced. The project "could have easily gone off track if any one group became the dominant voice," says Smith.

For example, he made sure that the software vendor MVCI selected didn't meet or speak solely with executives from its Asia-Pacific business unit and

Continued on page 56

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Continued from page 54

disregard the needs of the company's business process owners when designing the system.

Smith also played a central role in making sure that all of the key stakeholders were involved in the governance of the project. It required those players to study the market to determine which features would need to be added to the system during the first few years after its implementation and mapping that against available funding.

Smith's role in the effort has earned him praise from his boss. "Within an aggressive time frame, Dwight led a highly collaborative, cross-functional business team in implementing the technology required to enable a successful launch," says MVCI President Steve Weisz.

Although MVCI is still getting to know the Asia-Pacific time-share market, Smith says he's upbeat about its accomplishments thus far. "We feel pretty good about it," he says. "We've been able to achieve our plan."

ADRIAN M. BUTLER
Vice president of IT, telecommunications and support services, Accor North America, Carrollton, Texas

■ Project at a glance: The hotel operator expanded network bandwidth and made other technology enhancements, such as adding Wi-Fi for its Motel 6 brand.

■ Signature leadership move: Marshaled support for a network upgrade by identifying key business-unit leaders.

Butler, 37, knew that the aging frame-relay network that had been supporting Accor North America's Motel 6 business "wasn't fitting the bill anymore," as he puts it.

Problem was, any proposal to upgrade the existing frame-relay network infrastructure would have to compete for funding with other projects throughout the company. And unlike the types of IT projects that would have a more visible impact on the business, a network upgrade didn't carry a clearly quantifiable return on investment, notes Butler.

"So I worked with business counterparts in dissecting their needs and worked through the organization politically," says Butler. "It came down to finding people in the organization with a voice."

For instance, Butler discovered that Accor's training department was in need of additional network bandwidth to support its use of e-learning tools. Through his legwork, he found that other business divisions also required additional network capacity. So he worked with leaders from those departments to solicit their support and began communicating those requirements to the company's top executives.

Butler's efforts included determining what changes Accor needed to make to its network infrastructure to support its expanding business and operational requirements. He did this in large part by listening to business advocates, Accor's technical teams and other people throughout the organization.

To devise a new network strategy, Butler put a lot of energy into educating business executives and key stakeholders on the need for a new network infrastructure — in terms they could understand.

"I spent a lot of time at the beginning to make them comfortable with the language," he says. That included avoiding technical jargon and clearly explaining the benefits that a network upgrade could deliver.

Accor also wanted to increase its network bandwidth to support new customer relationship management and point-of-sale applications that are currently being added. For instance, Accor is beta-testing property management systems that will be rolled out to 100 Motel 6 locations by the end of this year, says Butler.

Around the same time it was upgrading its network, Accor was working on a separate project to encrypt customers' credit and debit card transactions as required by the Payment Card Industry (PCI) Data Security Standard.

Accor's CEO regarded the PCI effort as an organizational priority. And since Butler's project team was able to deliver encryption capabilities over the new network, the PCI effort, which earlier this year was named a winner in *Computerworld*'s Honors Program, would be a side benefit of the network upgrade.

It took Butler a few months, but he eventually rounded up the support he needed in October 2006.

It certainly helped that he was able to gain buy-in from senior management, starting with his own boss, Accor North America Executive Vice President and CIO Jeff Winslow. "My boss was instrumental in being a sounding board," says Butler.

"Adrian's strategic and technical leadership, vision and ability to align business objectives with IT strategy are keys to the success of this project and our organization," says Jim Amorosia, president and chief operating officer of Motel 6.

"[The project] maps directly back to our customers' perspective," says Butler. "[So] when they come to Motel 6, their data is going to be safeguarded." ■

"I worked with business counterparts in dissecting their needs and worked through the organization politically. It came down to finding people in the organization with a voice.

ADRIAN M. BUTLER, VICE PRESIDENT OF IT, TELECOMMUNICATIONS AND SUPPORT SERVICES, ACCOR NORTH AMERICA

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VOLUME 1 – ISSUE 5

Windows Server 2003

SWISS SEES RELIABILITY SOAR WITH WINDOWS SERVER, CHECKS RED HAT AT GATE

Tom Nagy for The Highly Reliable Times

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"Windows Server has given us the reliability to grow our online services and differentiate ourselves from the competition. With Linux, we didn't get the reliability or flexibility we needed."

– Frank Meyer, CIO, SWISS

Global Airline's Migration Yields 99.95% Reliability

By MICHAEL BETTENDORF

ZURICH—Swiss International Air Lines (swiss), Switzerland's national airline, serves 70 destinations around the world with 6,500 employees in 105 branch offices. Today, 14% of swiss's total ticket sales are processed through its online flight booking system at Swiss.com, with volume increasing by 30% per year. 24x7 operations are critical for this site because of its importance to the airline's business, but the original Red Hat Linux–based booking system was not meeting swiss's requirements. So the airline began its search for a more reliable platform.

Reliability also drives market perception in the airline industry, according to swiss CIO Frank Meyer. "In our business, having a plane in the maintenance hangar is not good for our image. It is the same for our online service—people expect it to be up and running," says Meyer.

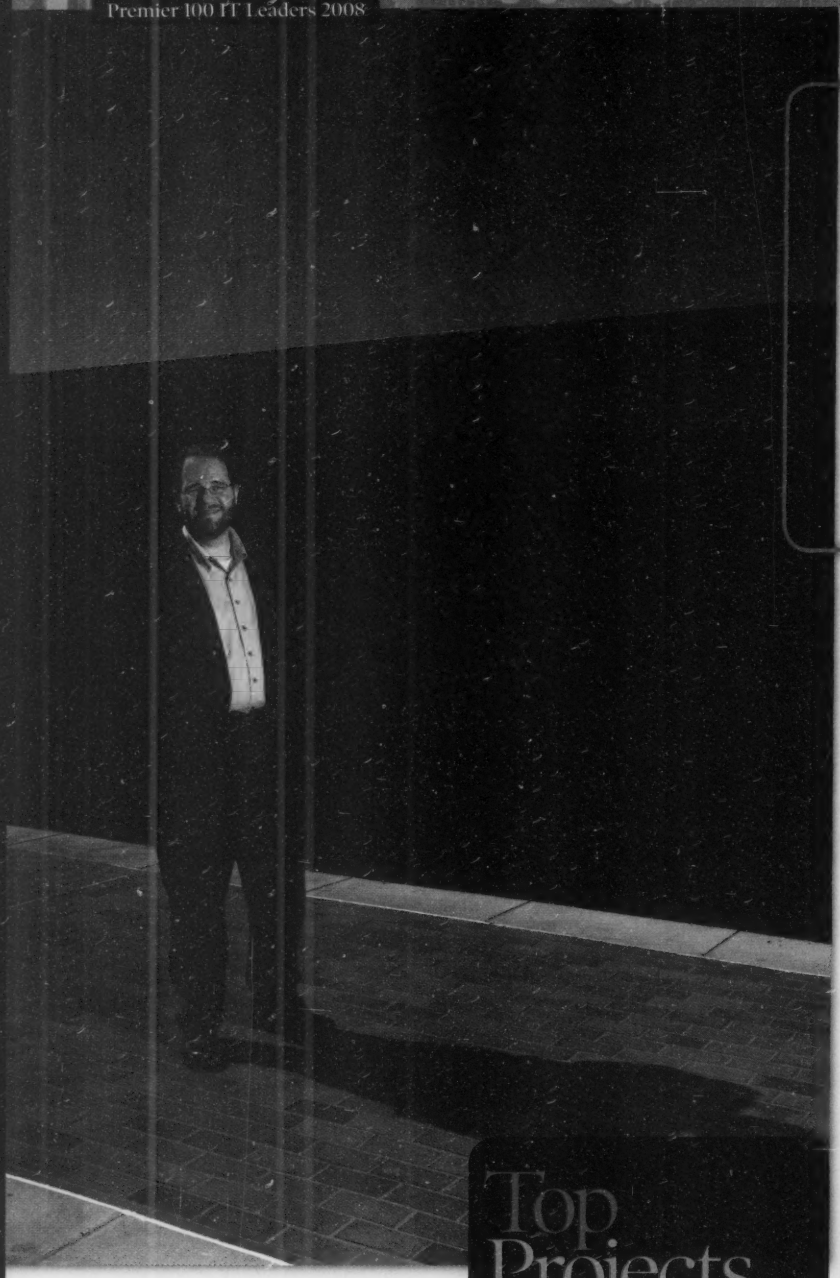
After an intensive evaluation, Meyer and his team chose Windows Server® 2003 and .NET. Since migrating the online booking system to Windows Server, swiss has seen reliability rise to 99.95%. In addition, while the previous Red Hat Linux–based system could only handle 250 concurrent users, the new system can now handle significantly more traffic than that. Meyer is confident about the effect of these changes: "Moving uptime to 99.95% while increasing performance to handle a greater number of users enables our team to easily handle the 30% growth we are seeing in our online sales."

For the full swiss story, plus other case studies and independent research findings on the reliability of Windows Server versus Linux, visit microsoft.com/reliable

STUDY: Side effects of reliability can include smiling, calmness

A study released today shows significant mood improvement in IT executives such as Frank Meyer (left) when they experience Windows Server reliability.

– Continued on Page B3



Top Projects

Outside the corporate world, the nonprofit arena tests the determination and diplomacy of IT leaders.

By Gary Anthes

CORPORATE IT managers are typically part of clear hierarchies, and their projects often have a single customer — the vice president of sales, say. But at nonprofit and public-sector organizations, IT is apt to serve diverse constituencies that are governed by consensus, not by fiat. Three Premier 100 honorees show that success in these arenas requires a deft touch.

CLARENCE D. WHITE,
CIO, IT SECRETARY, THE SALVATION ARMY, WESTERN TERRITORY

"It moved from being a tool to help the process – what [users] asked for – to an opportunity to allow technology to have an impact on our business and ministry.

CLARENCE D. WHITE

CIO, IT secretary, The Salvation Army, Western Territory, Long Beach, Calif.

■ **Project at a glance:** Development of Ministry Snapshot, an enterprise reporting and performance-analysis system that applies complex algorithms to present the "efficiency" of each local operation in simple graphical scorecards. It not only saves much manual labor for reporting, but also offers insights that weren't possible before.

■ **Signature leadership move:** Seized an opportunity to turn a technology fix into a bigger piece of the business strategy.

In 2003, The Salvation Army's Western Territory, which includes 13 states, had so many system silos, it looked like an aerial photograph of Nebraska.

"It was statistical information that we had collected for years, on hundreds of categories that we religiously asked people to submit every month — how many people have showed up for meetings, how many food boxes prepared, how many beds available and so on," says White. "We have been collecting that information for decades."

Not only that, but much of the administrative work at 250 local "corps" involved drawing information from those systems and compiling it into reports manually, a huge clerical effort every year.

Finally, although those unconnected data stores held huge amounts of information collected over decades, it wasn't feasible to combine and report the information in ways that might

Continued on page 60

PHOTO BY JOE TORENO

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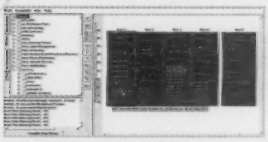

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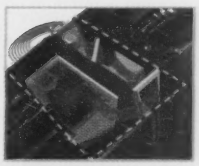

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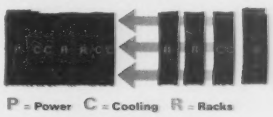

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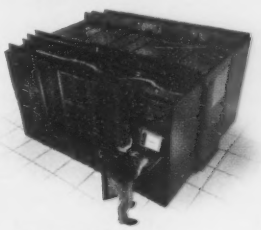

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have helped The Salvation Army understand and improve its operations. It was gold to be mined, says White, 44.

The databases hold information about financial data, the people and the physical assets for each corps, plus performance statistics in a hundred or so categories, such as local meeting attendance. The original request from local users was to automate the production of annual reports that drew on this data, White says.

"That spawned an idea for us. I said, 'We can develop a snapshot that gives you, in real time, the performance data that you have been gathering manually and display it on a Web site.' " says White. "Then we took it one step forward and said, 'Now that we have that information in a snapshot, we can create measures, ratios and scorecards and display them in the same snapshot.' It moved from being a tool to help the process — what [users] asked for — to an opportunity to allow technology to have an impact on our business and ministry."

The result was the Ministry Snapshot, an application that draws data from a number of sources and applies statistical methods, weighting and scoring algorithms to produce summary measures of the operating efficiency of each corps in graphical form. First deployed in 2005, the application has since undergone several updates.

Because it wasn't obvious how hundreds of factors could be combined to show efficiency — indeed, how "efficiency" should be defined — the development process was necessarily an iterative one, says White, who describes himself as the "visionary" for the project but not the project manager.

"As we saw something work, it always raised the question, 'It would be nice if . . .' Users had lots of great ideas for things they wanted to measure, and we did quite a number of iterations. In a traditional software development project, you might call that 'creeping featurism.' But it was our deliberate methodology," White explains.

Another challenge was to make the performance displays acceptable to the people whose operations were being viewed. "Even if all our units are performing terrifically, when we compare them against one another, some that are performing well are still going to end up in that 'undesirable' quadrant," White says. "That created quite a risk for this project, and it still does.

"Our culture is built on seeing potential in people and trying to identify the best in them. It's countercultural for us to put people in a negative quadrant."

His solution was to carefully position the Ministry Snapshot in a nonthreatening way. "We continuously remind people that this is not a report card," White says. "It's a business tool to help us know where to focus, to know where your time is best spent."

"Clarence White really caught the vision of capturing all our data streams and providing a visual tool for displaying the results," says Martin Hunt, assistant territorial program secretary. "The Ministry Snapshot is a fantastic tool for senior leadership and the local Salvation Army leader."

MICHAEL H. HITES, CIO AND VICE PRESIDENT FOR PLANNING AND IT, NEW MEXICO STATE UNIVERSITY

"We didn't make people hit every single milestone, but we did hold them publicly accountable for what they said they were going to do.

MICHAEL H. HITES
CIO and vice president for planning and IT, New Mexico State University, Las Cruces

■ Project at a glance: Rollout of a comprehensive ERP system for students, faculty and administration at NMSU, which has 13 research and science centers and 27,000 students. The system encompasses nearly all the major business functions of the university, such as accounting, student aid and payroll.

■ Signature leadership move: Took the lead as project champion, with zero tolerance for scope creep.

"Typically, you wouldn't go down all these roads at the same time," says Hites, 39.

That's something of an understatement. Hites and his colleagues rolled out SunGard Higher Education's Banner ERP software for student data, finance and accounting, financial aid, human resources and payroll, and alumni and development — virtually all key business functions of the university — in one megaproject for 35,000 students, faculty and administrators.

At the same time, it installed several other systems, including e-mail and a Web portal for students. The project kicked off in October 2003, and the last module went live this past February.

Hites says the ERP rollout cost just $15 million, about one quarter of the cost of a similar system going in at a comparable university in the region.

"Getting it done" was his greatest contribution to the project, he says. "We had a long history of finishing projects *almost* all the way."

Hites cites several reasons for the success of the huge project. "We had universal buy-in throughout the university before we started," he says. "And we empowered the functional units to manage their own portions of the project. For example, it was not thought of as an IT project in the financial aid office or an IT project in the registrar's office."

Another success factor was that the multidepartmental steering committee overseeing the project, which Hites chaired, took a tough stance on scope creep. "We had a strict adherence to a vanilla Banner," he says.

The university's president played a key role in keeping the SunGard Banner software "vanilla," or unmodified. He gave the 20-person ERP Steering Committee unprecedented power to make policy decisions that might have required many months of deliberation by the faculty senate, employee organizations and others groups.

"I was able to convince the president that if he would help us in this way, we could stay on budget and on time," Hites says.

For example, the committee was able to quickly make a major change

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"There's the original business case, and then there's reality. Be conservative. If you've got one number, you need to add a confidence-level factor, so you start to look at a range instead of a target, a minimum instead of a maximum.

BEN L. BERRY, CIO, OREGON DEPARTMENT OF TRANSPORTATION

Continued from page 60

to payroll that reduced what had been multiple pay cycles, such as biweekly, semimonthly and monthly, to one standard schedule.

"Normally, that would have had to go through the faculty senate, employee organizations and so on," Hites says. "It would have taken six to nine months, and they still might not agree."

The steering committee had to be chaired with a delicate touch, Hites recalls. "We had a tremendous amount of 'trust but verify.' We didn't make people hit every single milestone, but we did hold them publicly accountable for what they said they were going to do. When you are in a group of 20 of your peers and you're the one who didn't hit your timeline, it doesn't take very many words to make you feel bad."

The difference between big projects at universities and those in companies, Hites says, is the lack of well-defined hierarchies in academia.

"We have three separate but equal parties — students, faculty and administration," he says. "If you don't work with them throughout the whole process, any one of them can make your life miserable."

"Hites made this possible simply by taking the lead," says Ben Woods, senior vice president for planning, physical resources and university relations. "A step of this magnitude cannot be taken half-heartedly. It needs a champion who is absolutely committed to seeing it through successfully."

BEN L. BERRY
CIO, Oregon Department of Transportation, Salem

■ Project at a glance: It unfolded in two major phases: planning, which included preparing an inventory of statewide IT assets and preparing a business case for consolidation; and implementation, which resulted in the creation of a state data center with fault-tolerant and redundant components, two IBM zSeries mainframes, three iSeries mainframes, 900 servers and statewide network facilities.

■ Signature leadership move: Led a team of 12 CIOs to sell a compromise project plan to the state governing board.

Major departments of state governments typically go their own way with IT, with each having its own data center. But Oregon recently became one of just three states to consolidate data centers and networking infrastructures into one large, shared facility.

The objective of the consolidation, says the project's leader, Berry, was to reduce costs while maintaining or improving service levels. He says his agency is already saving 5% of its server, mainframe, network and storage costs, but the real savings won't kick in until the fifth year, after amortization of loans and interest.

Berry, 55, was chairman of a 12-person committee of CIOs for the project, but he prefers to call himself a "facilitator."

"This [committee] kind of changed our culture to where it wasn't just command and control in your own shop, but more of a collaboration for a greater good," he says. "That meant giving up the infrastructure that each of us owned."

The CIOs encountered a major stumbling block when they discovered that the consolidated facility would need more people than they had first anticipated. The original plan had been to put 93 employees in the new center and lay off 62.

"But we had all that tribal knowledge in people walking out the door, and we had the transition period of a year. What would happen if we were understaffed? With 93 people, stuff would have fallen over," Berry says. With the state legislature counting on big labor savings, the CIOs clearly had a problem.

The solution was for Berry to work with the other CIOs to present a persuasive case to the governing board, which in turn sold it to the legislature. As a result, nearly all of the 155 workers were retained initially, with the idea that staff size would shrink over time and that the cost savings would increase.

Berry says that CIOs who are going down a similar path should realize upfront that their best cost estimates are likely to be low. "There's the original business case, and then there's reality," he says. His advice: "Be conservative. If you've got one number, you need to add a confidence-level factor, so you start to look at a range instead of a target, a minimum instead of a maximum."

Michael Marsh, deputy director of the Oregon Department of Transportation, says pulling all the parties together for the project was a "huge challenge." It required Berry to deal with issues of trust and autonomy, collective bargaining and service-level agreements. "It was a huge deliverable, and Ben was in a premier role as head of the CIO group," Marsh says.

"He focused very specifically on customer service," Marsh adds. "He made sure that all the perspectives of all agencies were heard by the vendor and by the folks implementing it. He also worked hard to make sure that the agencies communicated well." ■

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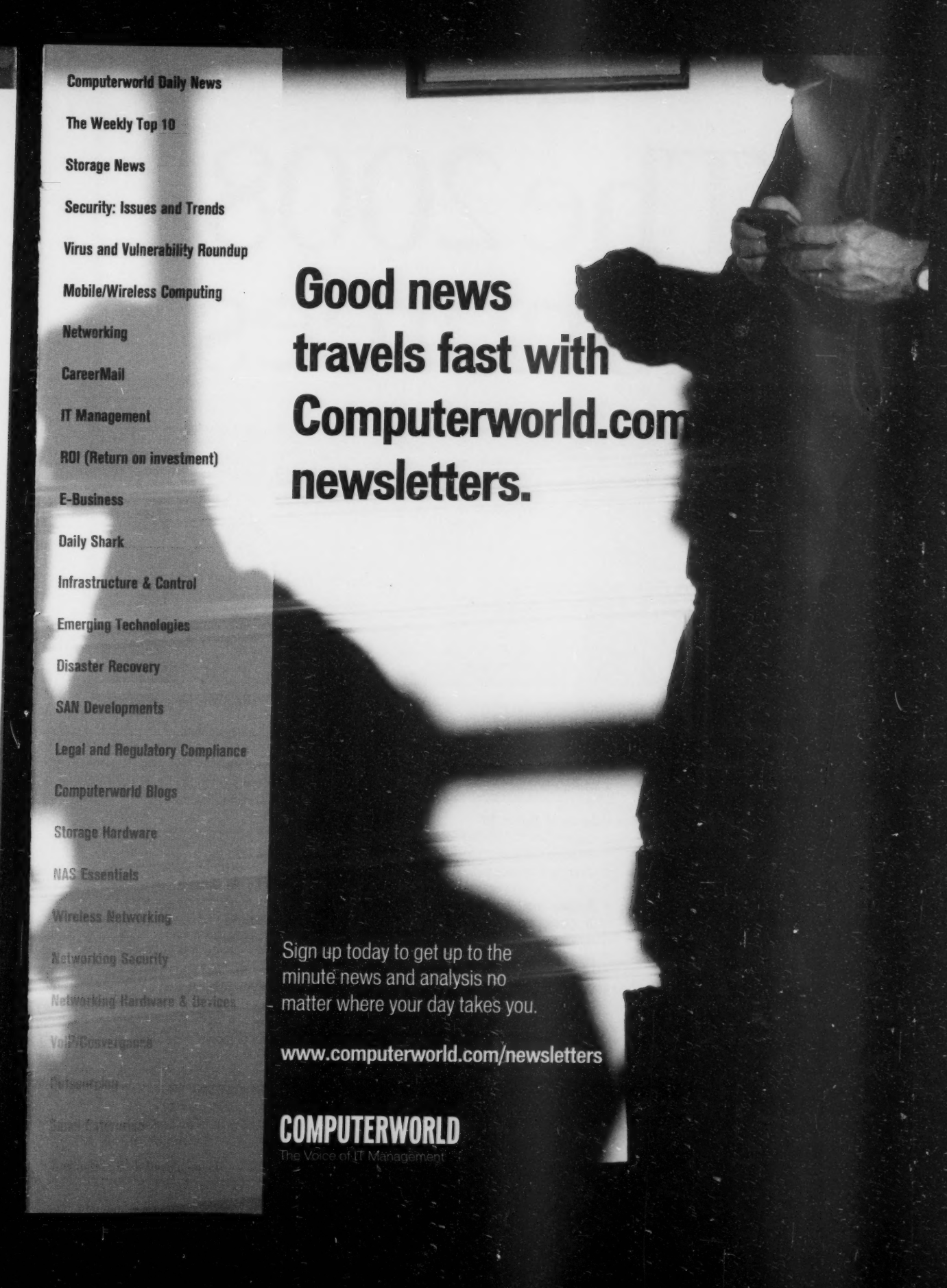
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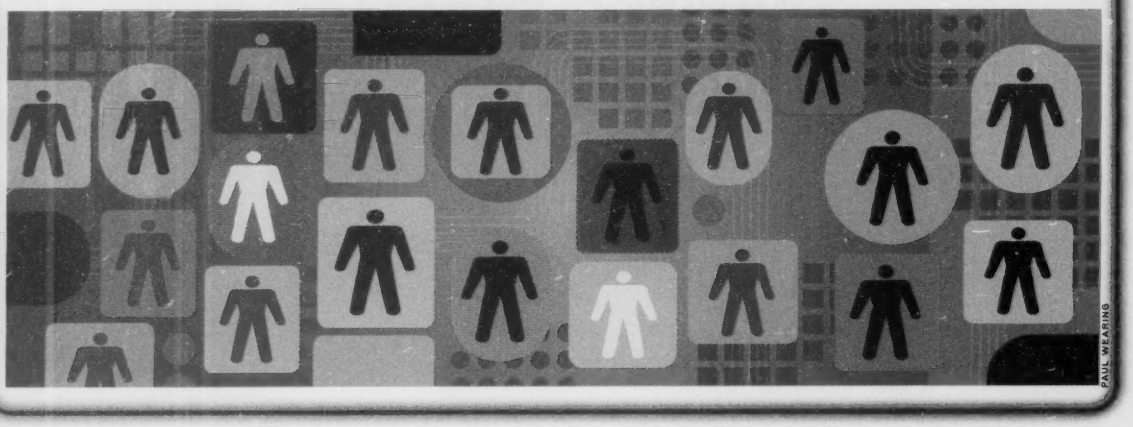

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CIO, Oregon Department of Transportation, Salem

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President and CEO of the operations, technology and government services business unit, WellPoint Inc., North Haven, Conn.

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Chief technology officer, Animas Corp./Johnson & Johnson, West Chester, Pa.

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Executive director of global infrastructure, Accenture LLC, Chicago

Michael J. Carlson, 44
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Wendy M. Cebula, 36
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CIO, Avanade Inc., Seattle

Phil Chuang, 39
CIO, Telecare Corp., Alameda, Calif.

Ken L. Cooke
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Eric W. Cowperthwaite, 40
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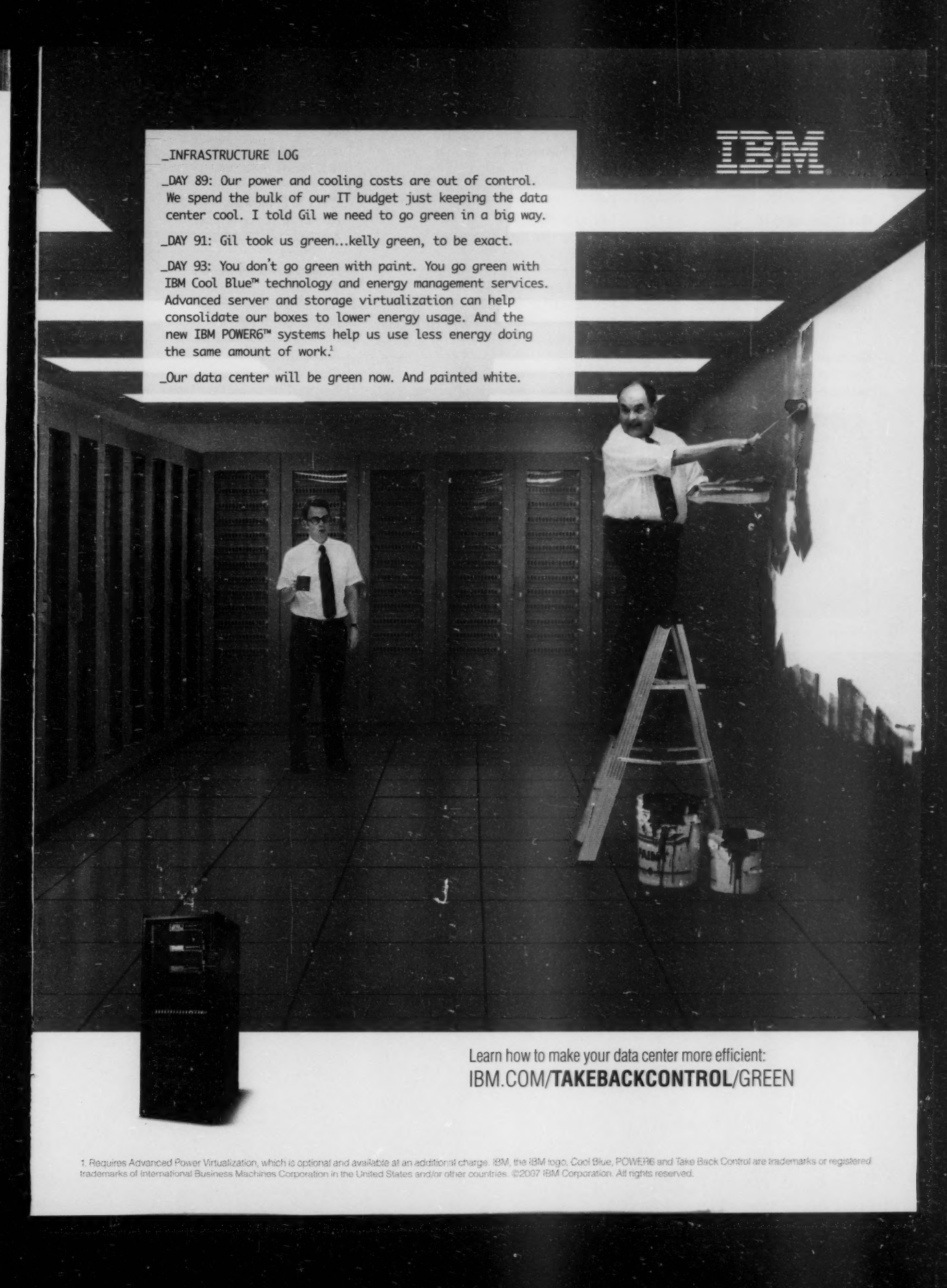
_INFRASTRUCTURE LOG
_DAY 89: Our power and cooling costs are out of control. We spend the bulk of our IT budget just keeping the data center cool. I told Gil we need to go green in a big way.
_DAY 91: Gil took us green...kelly green, to be exact.
_DAY 93: You don't go green with paint. You go green with IBM Cool Blue™ technology and energy management services. Advanced server and storage virtualization can help consolidate our boxes to lower energy usage. And the new IBM POWER6™ systems help us use less energy doing the same amount of work.[1]
_Our data center will be green now. And painted white.
IBM
Learn how to make your data center more efficient:
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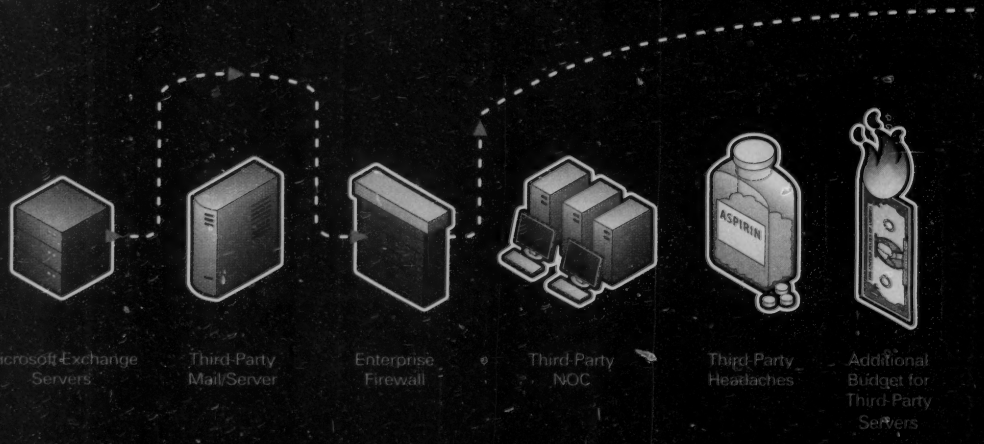

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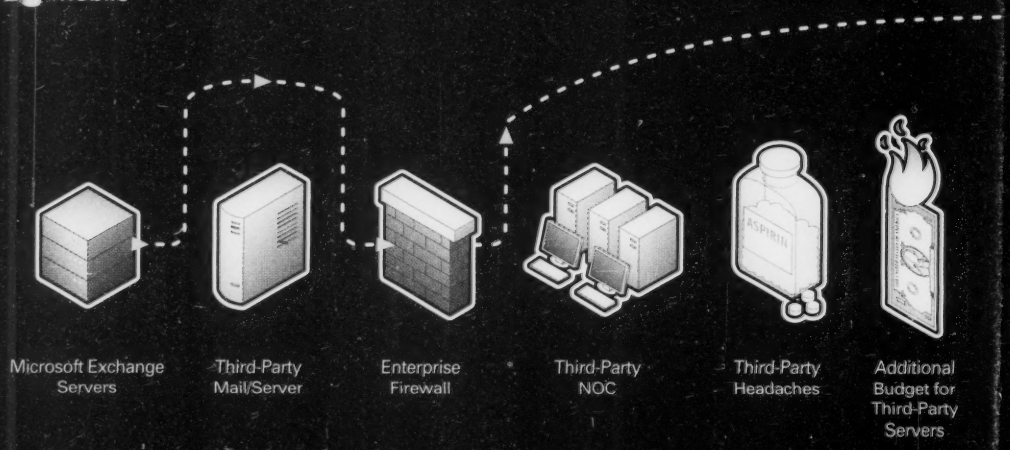

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Project manager of logistics modernization program

U.S. Army, Fort Monmouth, N.J.

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Ram Murthy, 47
Director of application systems,
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CIO, Scottrade Inc., St. Louis

Scott Penberthy, 42
Chief technology officer,
Heavy Inc., New York
(formerly vice president of engineering,
Photobucket Inc., Denver)

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Intermountain Healthcare, Salt Lake City

Neal A. Puff, 44
CIO, Yuma County, Yuma, Ariz.

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CIO of BT Wholesale,
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Charles M. Smith, 43
Director of technology business operations,
TD Ameritrade Inc., Columbia, Md.

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James E. Schinski, 48

CIO, vice president

Midwest Independent Transmission System Operator, Carmel, Ind.

Favorite book: ***Freakonomics*****, by Steven D. Levitt and Stephen J. Dubner**

Favorite movie: ***Raiders of the Lost Ark***

What would surprise the people with whom you work?
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Douglas Merrill
Chief Information Officer and Vice President, Engineering, Google

Wynne Hayes
Chief Technology Officer, Enterprise Platforms and Business Solutions, Constellation Energy Group

Derek Chan
Head of Digital Operations, DreamWorks Animation SKG

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AGENDA-AT-A-GLANCE

SUNDAY, MARCH 9, 2008

Noon – 5:00pm **Pre-Conference Golf Outing**

7:00pm – 9:00pm **Welcome Reception**

MONDAY, MARCH 10, 2008

8:00am – 8:15am **Opening Remarks**
Julia King, Executive Editor, Events and National Correspondent, Computerworld

8:15am – 8:55am **Opening Visionary Address**
Douglas Merrill, Chief Information Officer and Vice President, Engineering, Google

8:55am – 9:30am **Smarter, Safer and More Secure Healthcare**
Asif Ahmad, Vice President, Diagnostic Services and Chief Technology Officer, Duke University Health System & Medical Center

9:45am – 10:30am **Panel Discussion: Re-engineering Redux: IT Leaders' Expanding Role in Crafting, Enabling and Executing Better Business Processes**
Moderator: Julia King, Executive Editor Events, Computerworld/National Correspondent
Panelists: Wynne Hayes, Chief Technology Officer, Enterprise Platforms and Business Solutions, Constellation Energy Group; Anthony Hill, Chief Information Officer, Golden Gate University ; Jeffrey Steinhorn, Chief Information Officer, Marketing and Refining, Hess Corp.; Ajay Waghray, Chief Information Officer, Verizon Wireless

10:40am – 12:30pm **Concurrent End-User Case Studies**

2:00pm – 2:45pm **Panel Discussion: Advancing an Agile, Intelligent and Energy-Efficient IT Infrastructure: Lessons from the Leading Edge**
Moderator: Robert Mitchell, National Correspondent, Computerworld
Panelists: Brian Cobb, Senior Vice President - Enterprise Systems Management, Information Technology , Fannie Mae; Rick Franckowiak, Director, Information Technology, Johnson & Johnson Pharma R&D, LLC; Ian Patterson, Chief Information Officer, Scottrade; Teri Takai, Chief Information Officer, State of Michigan

2:45pm – 3:20pm **Visionary Presentation**

3:35pm – 4:10pm **Mobility Changes Everything: Building New Customer Touch Points**
David Zanca, Senior Vice President, E-Commerce Technology, FedEx Corporate Services

4:10pm – 4:40pm **Enabling Anywhere, Anytime Creativity**
Derek Chan, Head of Digital Operations, DreamWorks Animation SKG

5:00pm – 6:00pm **Networking Session/Activity**

6:00pm – 8:00pm **Networking Reception**

TUESDAY, MARCH 11, 2008

8:10am – 8:15am **Opening Remarks**
Julia King, Executive Editor, Events and National Correspondent, Computerworld

8:15am – 9:00am **Opening Visionary Address**
Jonathan Koomey, Ph.D., Project Scientist, Lawrence Berkeley National Laboratory and Consulting Professor, Stanford University

9:00am – 9:45am **IT End-User Case Study**
Michael Carlson, Vice President and Chief Information Officer, Xcel Energy

10:00am – 10:30am **IT End-User Case Study**

10:40am – 12:30pm **Concurrent End-User Case Studies**

2:00pm – 2:45pm **Panel Discussion: Re-Stocking The IT Talent Pool: An Executive Brainstorming Session**
Moderator: Julia King, Executive Editor Events, Computerworld/National Correspondent

2:45pm – 3:30pm **IT End-User Case Study**
Dale Frantz, Chief Information Officer, Auto Warehousing Co.

3:45pm – 4:30pm **IT End-User Case Study**
Steve Schuckenbrock, Chief Information Officer, Dell

4:30pm – 5:25pm **IT End-User Case Study**
Don Tapscott, author of *Wikinomics: How Mass Collaboration Changes Everything*

5:25pm – 5:30pm **Closing Remarks**

7:00pm – 7:30pm **Cocktail Reception**

7:30pm – 9:30pm **Gala Evening, "Best in Class" Awards and Honoree Recognition, and Entertainment by the Capitol Steps**

Pre-conference Golf Outing

Sunday, March 9 at the Shingle Creek Golf Club

Please contact Chris Johnson at chris_johnson@computerworld.com for details.

Gala Evening and Entertainment

Tuesday, March 11

Don't miss the Premier 100 Gala evening and awards ceremony that will include political satire and music from the Capitol Steps!

To register as an IT end-user executive, please visit www.premier100.com

To participate with vendor sponsorship, call John Vulopas at 508-271-8024

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Dwight D. Smith, 46
Senior vice president of information resources, Marriott Vacation Club International, Orlando

Steven J. Spano, 46
Director of communications and information headquarters, United States Air Forces in Europe, Germany

Jeffrey L. Steinhorn, 43
CIO of marketing and refining, Hess Corp., Woodbridge, N.J.

Robert A. Strickland, 43
Senior vice president, CIO, T-Mobile USA Inc., Bellevue, Wash.

Keith R. Sturgill, 44
Vice president, CIO, Eastman Chemical Co., Kingsport, Tenn.

James M. Swartz, 59
CIO, vice president, Sybase Inc., Dublin, Calif.

William J. Sweeney, 49
Managing director of global risk, compliance and legal technology, Citigroup Inc., New York

Teri M. Takai, 58
CIO of Michigan Department of IT, State of Michigan, Lansing

Joseph J. Tufano, 55
Vice president, CIO
St. John's University, Queens, N.Y.
Passions outside work:
Family, golf and travel to Italy
Favorite sport: College basketball
In your MP3 or CD player:
Andrea Bocelli, Michael Amante, The Beach Boys and Bob Dylan
What would surprise the people with whom you work?
"While in college, I drove a horse-drawn carriage in Central Park."

Akhil Tripathi
Senior vice president, CIO, Harleysville Mutual Insurance Co., Harleysville, Pa.

George A. Vega, 45
Managing director, head of capital markets technology, Wachovia Corporate & Investment Bank, Charlotte, N.C.

Jeffrey R. Vose, 41
Production systems director, Chicago Tribune Interactive

Ajay Waghray, 45
CIO, Verizon Wireless, Basking Ridge, N.J.

Richard D. Warren, 55
Vice president, CIO, Foote Health System, Jackson, Mich.

Clarence D. White, 44
CIO, IT secretary, The Salvation Army, Western Territory, Long Beach, Calif.

Michael F. Williams, 38
Executive director of IT, Immune Tolerance Network, University of California at San Francisco

Craig Woods, 55
Manager of technology support, United States Postal Service, Washington

Amelia W. Wright, 46
Formerly senior vice president, CIO, AmeriPath Inc., Addison, Texas

David G. Zanca, 49
Senior vice president of e-commerce technology, FedEx Corporate Services Inc., Collierville, Tenn.

ONLINE: Premier 100 Honor Roll: For a list of all 900 honorees, past and present, visit *www.computerworld.com/08/p100*.

How the Leaders Were Chosen

Each year, *Computerworld* evaluates nominated IT executives for inclusion as Premier 100 IT Leaders in a multistep survey process. For a detailed look at our methodology, visit *Computerworld.com/08/p100*. Special thanks go to our seven judges, themselves Premier 100 IT Leader alumni (years noted), who helped select this year's honorees.

Tony R. Caesar, CIO, Head/Penn Racquet Sports Inc., Phoenix (2007)

James J. Foote, vice president of field technology and technical services, Automatic Data Processing Inc., Dealer Services Division, Portland, Ore. (2007)

Richard H. King, executive vice president and chief operating officer, Thomson North American Legal, Eagan, Minn. (2007)

Earl R. Monsour, director of strategic information technologies, Maricopa Community College District, Tempe, Ariz. (2006)

Timothy C. O'Rourke, vice president for computer and information services, Temple University, Philadelphia (2004)

Robert A. Rosati, senior vice president and CIO, Werner Co., Greenville, Pa. (2001)

Keith Thibodeaux, CIO, Lafayette Consolidated Government, Lafayette, La. (2006)

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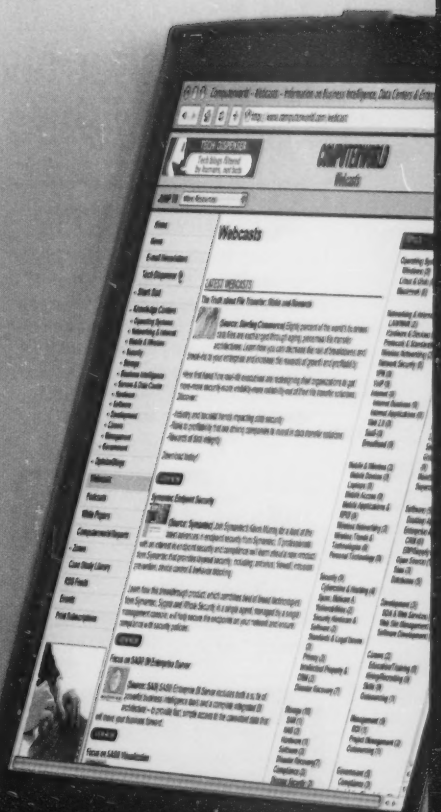


The Premier Agenda

The 2008 budgeting, purchasing and project plans of this year's Premier 100 IT executives

SPENDING POWER

Nearly two-thirds (65%) of this year's Premier 100 IT Leaders said their IT budgets had increased in 2007, by an average of 15%. Only 14% saw a decrease (of 12%, on average) and 21% reported that their budgets remained the same. Here's what the 100 IT executives have to spend in 2008.

TOTAL IT BUDGET FOR 2008

$2M to $9.9M	13%
$10M to $49.9M	34%
$50M to $249.9M	27%
$250M to $999.9M	16%
$1B to $1.5B	8%
Greater than $1.5B	2%

MISSION-CRITICAL

IT leaders identified the most critical technologies that will receive funding priority at their companies in 2008.

1.	Software development and upgrades
2.	Network infrastructure
3.	Data management and business intelligence
4.	Security tools
5.	Disaster recovery and continuity planning
6.	Content management tools, including intranets, extranets and portals
7.	Storage networks
8.	Wireless and mobile technology
9.	E-business software

NEW FACES

More than half the 2008 IT leaders oversaw staffing growth within their departments in the past year.

Increased staff size	53%
Decreased staff size	15%
No change in staff size	32%

IN THE PIPELINE

The Premier 100 IT Leaders put these projects at the top of their to-do lists for 2008.

1.	IT governance, including business alignment
2.	Vertical industry and company-specific projects
3.	Infrastructure and architecture upgrades
4.	Data management initiatives, including data warehousing and business intelligence
5.	ERP and supply chain projects
6.	Networking upgrades
7.	Security initiatives
8.	CRM rollouts
9.	E-commerce projects
10.	Collaboration initiatives

POWER PARTNERS

The top 10 strategic vendor partners or suppliers of the 2008 honorees:

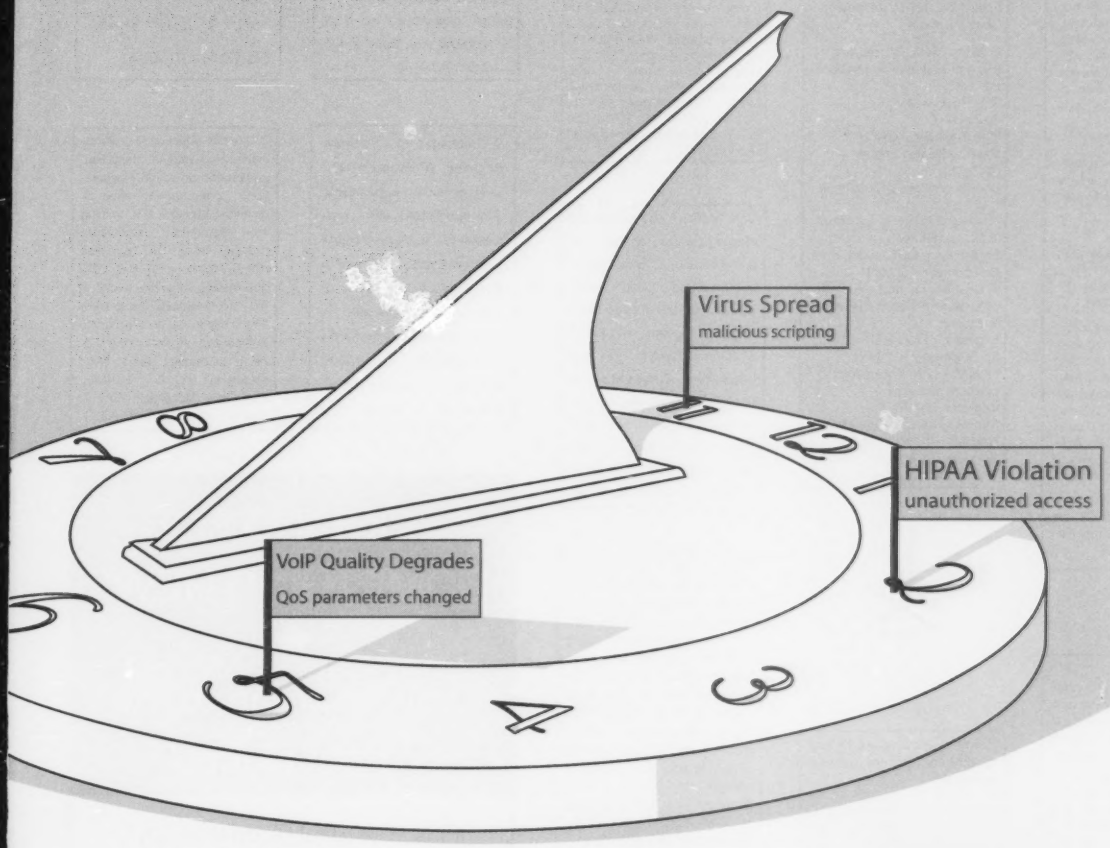
1. Microsoft Corp.
2. IBM
3. Hewlett-Packard Co.
4. Oracle Corp.
5. Dell Inc.
6. Cisco Systems Inc.
7. SAP AG
8. EMC Corp.
9. Sun Microsystems Inc.
10. Verizon Communications Inc.

Leaders and Managers

Average size of IT staff	131,506
Average size of IT staff for which each honoree is responsible	428

NOTE: INFORMATION IN THIS PACKAGE REFLECTS SURVEY DATA COLLECTED IN JULY AND AUGUST 2007.

Turn back network time.



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Multiple IT Related Positions (National Placement out of Bethlehem, PA). Analyze, design, develop, test, administer, customize and implement computer software applications. Candidates may qualify for either job listed below:

Senior Software Engineers: Bachelors Degree or equivalent in Information Systems, Business, Computers, Engineering, Electronics, Sciences or Mathematics with five years related experience or Masters Degree with at least one year experience in relevant technologies.

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Must have experience with J2EE and Weblogic or Websphere and XML and Oracle or SQL.

Ref# NET-701
Must have experience with VB.NET OR ASP.NET; and Visual Basic and Oracle OR SQL and DCOM or COM

Must be able to relocate to different client sites as needed nationwide. 9-5, 40 hrs/wk. Please use reference (Ref#) when applying for job you are interested in and Send resumes to Attn: HR, Love Health, LLC t/d/b/a Pinnacle Technology, 5842 Monocacy Dr Bethlehem PA 18106 USA.

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Advanced Micro Devices, Inc., Boxborough, MA, multiple levels of Hardware Engineering & Product Development positions are avail:
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Design Engineer II – BX28412
In Austin, TX, Engineering positions are avail:
Sr. MTS Product Development Engineer - T28619
Submit resume to AMD, 5204 E. Ben White Blvd., M/S 672, Austin, TX, 78741 ref approp job title & req #.

In Santa Clara, CA, multiple levels of Engineering positions are avail:
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Staff Engineer – CA23413
Physical Design Engineer – CA23412
Sr. Physical Design Engineer – CA23411
Sr. Design Engineer - CA6874
In Schaumberg, IL, Engineering positions are avail:
Sr. Engineer – IL24411
In Orlando, FL, multiple levels of Engineering positions are avail:
Engineer – FL25412
Sr. Engineer – FL25411
In Yardley, PA, Engineering positions are avail:
Engineer – YA26411
Submit resume to One AMD Attn: M/S101, P.O. 3453, Sunnyvale, CA 94088-3453 ref approp job title & req #.

Computer & Information Systems Manager w/Masters in Comp Sci or Engg or Math & 1 yr exp to perform project planning, provide project time estimates, plan meetings, supv team work. Dsgn & dev s/ware for major fin'l applics. Supv rollout processes, do reqmts gathering. Use Java, JDBC, Multithreading, Java Collections & Java Beans to dvlp applics. Use J2EE Enterprise technology, Servlets, JSP, EJB, Struts, Spring, Hibernate. Use Tomcat & IBM Websphere for deployment. Work w/Oracle, Sybase d/bases. Work on UNIX, Win, perform Autosys admin & support tasks. Supv 3 Comp Consultants. Mail res to: Open Systems Technologies, 462 7th Ave, 15th Fl, NY, NY 10018. Job loc: NYC or in any unanticipated locs in USA

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Bucyrus International, Inc., a manufacturer of mining machinery and equipment located in South Milwaukee, Wisconsin, is seeking a Business Systems Analyst IV to review, analyze and evaluate business systems and user needs; formulate systems and participate in long range planning of information technology initiatives to support strategic corporate goals; write detailed descriptions of user needs, program functions, and steps required to develop or modify business systems and programs. Requirements: Master's degree in computer sciences or a relevant business or technical discipline, plus three years of experience analyzing, designing and developing information systems with BaaN or Oracle OR bachelor's degree, plus five years of experience. Must have BaaN Tools Certification. Hours are 7:30 AM to 4:15 PM. Interested candidates should e-mail a resume to lreinhardt@bucyrus.com.

IT firm in Indianapolis, IN has multiple openings for following positions:

Quality Assurance Analysts: Conduct QA, develop test plans/methodology to test internet,intranet,OO & client server applns.Use of Oracle,QA w/Mercury & Rational tools.Code #110.

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Req's BS/MS or equiv in Engg(any),CS or related,w/1-2 yrs exper.May require travel and/or relocation.Mail resumes stating code# to RCR Technology Corporation, 251 North Illinois St, #1150, Indianapolis, IN 46204.EOE.

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TRUE TALES OF IT LIFE AS TOLD TO SHARKY

A Plan's a Plan

Days before the move to a new building, a 200-port network switch has yet to be delivered. "The vendor is very reliable, so I wasn't worried," says a pilot fish on-site. "The engineering supervisor in charge of the overall construction project wasn't so sure. He demanded an immediate backup plan, in spite of my noting that only the switch will do, since we are too far away to run connections directly." A day later, the switch arrives – just as fish's backup plan shows up at the manager's desk. "I tied two paper cups together with string, then attached five 3-ounce bathroom cups via dental floss for the network drops," fish says. "Fortunately, he had a sense of humor."

Precisely

Boss decrees that all users in the office will install a particular piece of software on their PCs, and this old-school pilot fish isn't impressed. "It was some half-baked, homegrown tracking program that most people said didn't work," fish grumbles. "I don't know why, but everyone received his very own CD with the software on it – probably the boss didn't know any better. I complied with the decree: I placed the CD on the left back corner of my desk and told everyone that I had the software on my desktop. Not much later, we were quietly told that we no longer had to use that program."

That Darned Complex IT Jargon!

This transportation company uses GPS to track where everything things is. "Information from a mobile GPS location-tracking system is radioed back to a base station where a modem connection talks to servers," explains a pilot fish working with it. "One time, the circuit to a field site modem failed – not an unusual event. When the support desk was told there was no signal from the remote site and that the circuit needed to be reported to the vendor, the person at the help desk replied, 'What does *no signal* mean?' "

Admit Nothing

Telecom manager at this company has never admitted to any problems on his network, says a pilot fish on the scene – at least until the day he lets down his guard and he reports the following: "We have not had any network faults, but the work we did over the weekend might have fixed it."

Like There's Any Other Option?

Pilot fish reports the following message that flashes on the screen as a high-end CAD program begins installation: "Please wait if computer freezes during extraction."

■ *Sharky's trying not to freeze while I wait for your true tale of IT life. Send it to me at sharky@computerworld.com. I'll send you a sharp Shark shirt if I use it.*

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Periodical postage paid at Framingham, Mass., and other mailing offices. Posted under Canadian International Publication agreement #41321518. **CANADIAN POSTMASTER:** Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A 7C9. Computerworld (ISSN 0010-4841) is published weekly, except for a single combined issue the first two weeks of July and the last two weeks of December by Computerworld, Inc., 1 Speen Street, Box 9171, Framingham, Mass. 01701-9171. Copyright 2007 by Computerworld Inc. All rights reserved. Computerworld can be purchased on microfilm and microfiche through University Microfilms Inc., 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Computerworld is indexed. Back issues, if available, may be purchased from the circulation department. Photocopy rights: permission to photocopy for internal or personal use is granted by Computerworld Inc. for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of $3 per copy of the article, plus 50 cents per page, is paid directly to Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970. Reprints (minimum 100 copies) and permission to reprint may be purchased from Erik Eberz, Computerworld Reprints, c/o The YGS Group, Greenfield Corporate Center, 1808 Colonial Village Lane, Lancaster, Pa., 17601, (800) 290-5460, Ext. 150. Fax: (717) 399-8900. Web site: www.reprintbuyer.com. E-mail: computerworld@theygsgroup.com. Requests for missing issues will be honored only if received within 60 days of issue date. Subscription rates: $5 per copy; U.S. – $99.99 per year; Canada – $130 per year; Central & So. America, $250 per year; Europe – $295 per year; all other countries – $295 per year. Subscriptions call toll-free (888) 559-7327. **POSTMASTER:** Send Form 3579 (Change of Address) to Computerworld, PO Box 3500, Northbrook, Ill. 60065-3500.

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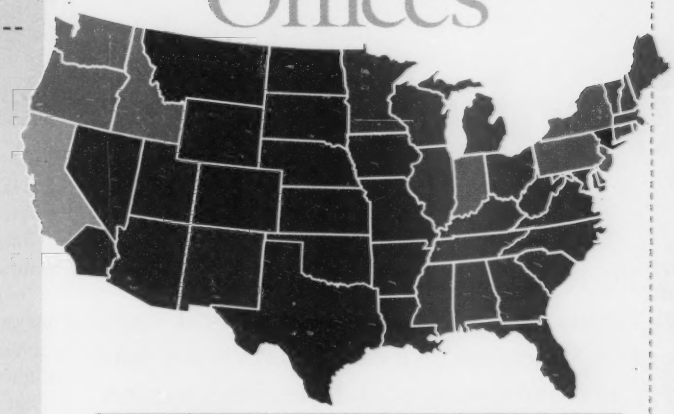

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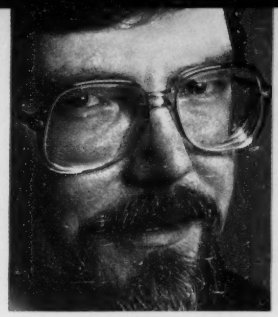
■ FRANKLY SPEAKING

Frank Hayes



It's Simply Politics

SIMPLIFY TO INNOVATE. If you walk away from this year's Premier 100 issue of *Computerworld* with one idea, make it this one: We can rethink everything we do in IT to make it simpler and then leverage that simplicity to make both IT and users more innovative.

In fact, these 100 IT leaders say there's no other way to do it.

We're accustomed to thinking that we can't really reduce complexity — just move it around. If we make things simpler for users, our operations and development have to be more complex, so we'll get less done. If we keep things simple for programmers or IT operations, users will face more complications, so *they'll* be less effective.

But this "shuffling deck chairs on the Titanic" approach can't work any longer. And as Julia King reports in her story on page 23, it doesn't have to. Premier 100 honorees are simplifying what both IT people and users do — and freeing everyone up for innovation.

How? By pushing complexity not to users, not to developers or IT operations, but all the way back to politics.

To get working applications to users fast, we have to fight scope creep. That means getting business project sponsors to buy into 90% solutions that we can deliver in weeks, not years. And keeping projects on track using the simplest, cleanest technology and designs we can. And staying focused on the reality that we can't empower users until we deliver working systems.

That requires lots of political work: glad-handing and horse-trading, compromise, and leadership. It's not technical. It's hard, maybe unfamiliar, certainly complex.

It's also what IT — and business users — need.

Extra features? Whizbang technology? We can push those things to future versions as enhancements. In the meantime,

■ Push complexity not to users or developers or IT operations, but all the way back to politics.

IT gets the project done, and users can actually do business with it.

We can reduce hardware variety, which makes life simpler for IT. Better still, we can reduce the variety of systems that users are forced to use, giving the business much more flexibility — transferred users don't have to be retrained, and fixes and work-arounds are universal.

Is that hard to sell to the business side? Sure. Those managers think they want customization. They believe "that's the way we've always done it" is the best possible business case. They fear the cost and effort of new training. Maybe they just fear change.

But users can grasp new technology. Most of them learn new tech every day. And users can handle new 90% solutions, especially when the old systems are filled with kludges and ugly hacks to squeeze out the last few percentage points of functionality.

The hard part is the politics.

By pushing the complexity into the negotiation of projects, IT's productive work is simpler. That means developers and IT operations people can focus on making users' work simpler. And it means everyone has more elbow room in which to find better, more profitable ways to do business.

That's the IT-based innovation we've trumpeted for decades but generally haven't succeeded at delivering — not just cutting costs, but transforming the business.

Technical staffers have to be part of this. But the heavy lifting will fall to IT leaders: the CIOs and IT VPs who must drive the complexity into the politics — and then do the hard, delicate, on-the-ground work to keep it there.

Think you're up to it? You'd better be. Because that's the only way IT can simplify to innovate.

And it's the very definition of what it now means to be an IT leader. ■

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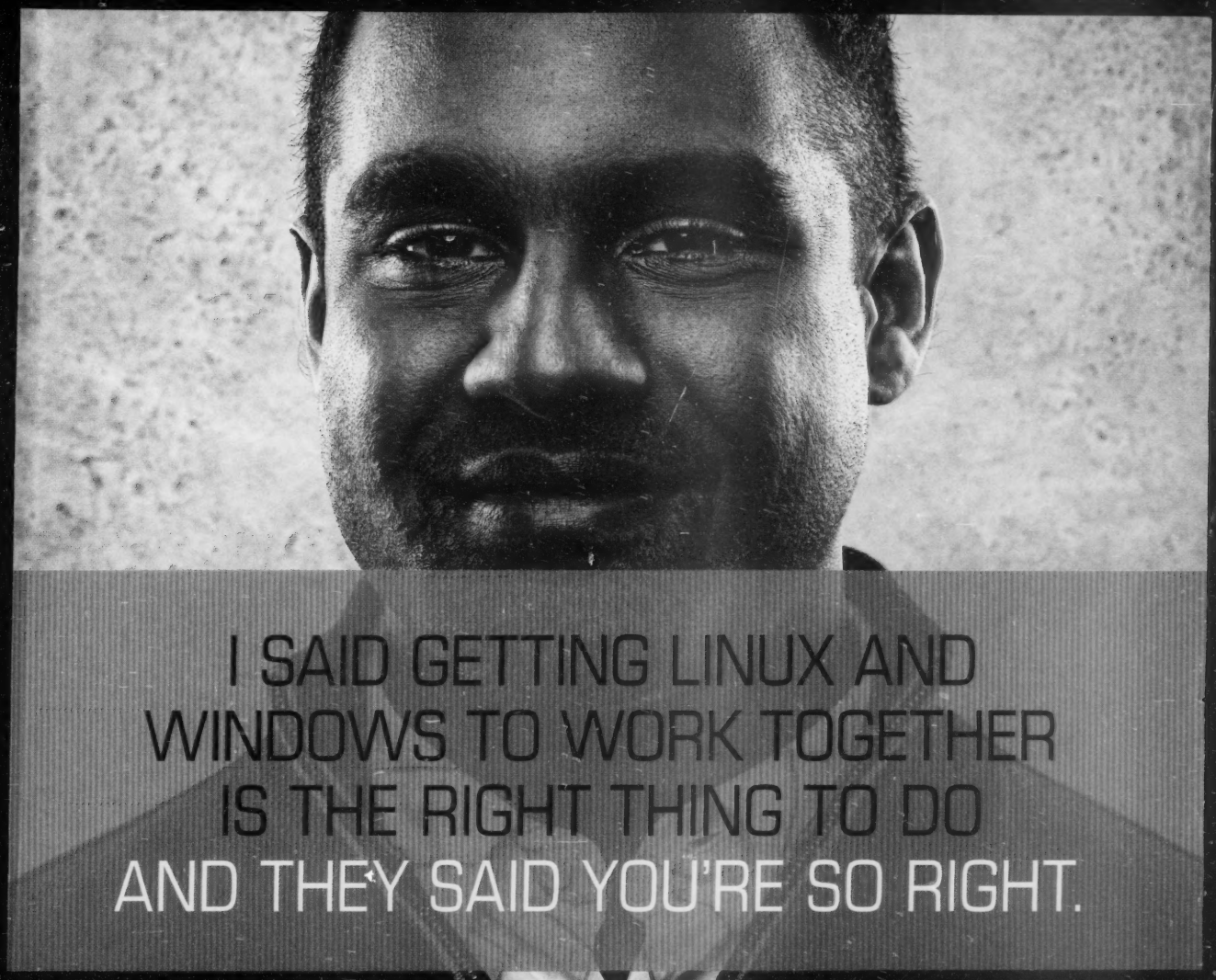

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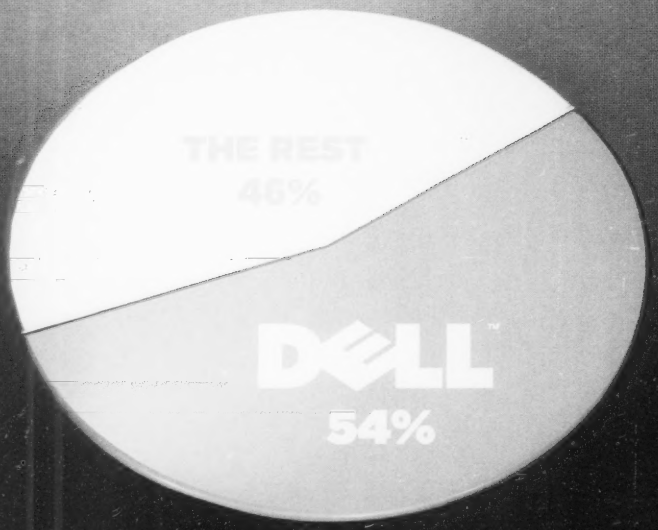

According to Forrester Research, more than half the enterprise companies in North America and Europe rely on Dell for notebook and desktop computers.
Who do you rely on?

–How Enterprise Buyers Rate Their PC Suppliers And What It Means For Future Purchases, Forrester, November 2007.

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Actual Forrester quote: "Dell is clearly the No. 1 enterprise desktop and laptop supplier." Survey question: "From which vendor did you purchase desktops in the last 12 months?" Base: 565 PC decision-makers at North American and European Enterprises.